INDIAN MINES ACT, 1923

ANNUAL REPORT

OF THE

CHIEF INSPECTOR OF MINES IN INDIA

FOR THE YEAR ENDING

31st DECEMBER 1937

DELHI MANAGER OF PUBLICATIONS
1938

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FROM

W KIRBY, ESQ, B Sc, M I Min. E,
CHIEF INSPECTOR OF MINES IN INDIA

TO

THE SECRETARY TO THE GOVERNMENT OF INDIA
DEPARTMENT OF LABOUR,
SIMLA

Dated Dhanbad, the 30th May 1938

SIR,

I have the honour to submit the report upon the inspection of mines in British India for the year ending 31st December 1937

INTRODUCTION

The separation of Burma from India took effect from 1st April 1937, and no statistics for Burma have been included in this report

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SECTION I.—PERSONS EMPLOYED.

During the year 1937 the daily average number of persons working in and about the mines regulated by the Indian Mines Act was 267,858, as compared with 269,593 in the previous year The decrease was 1,735 persons or 0 64

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per cent. Of these persons 122,807 worked underground, 72,747 in open workings and 72,304 on the surface. The numbers of men and women, respectively, who worked underground, in open workings and on the surface were as follows :—

	Men.		Women.	
	1937.	1936.	1937.	1936.
Underground . . .	118,920	123,423	3,887	7,301
In open workings . .	48,268	52,122	24,479	17,071
Surface	52,387	51,413	19,917	18,263
Total .	219,575	226,958	48,283	42,635

The number of women employed underground was 3,887, or 3·17 per cent. of the total number of men and women employed underground. The percentage of women employed underground in coal mines was 3·79, as compared with 6·87 per cent. in 1936, 8·99 per cent. in 1935, 10·94 per cent. in 1934 and 13·14 per cent. in 1933. The provincial distribution of the women who worked underground was as follows :—

Province.	Number of women employed underground.		
	In coal mines.	In salt mines.	Total.
Bengal	1,352	..	1,352
Bihar	2,185	..	2,185
Central Provinces	335	..	335
Orissa	..	..	..
Punjab	..	15	15
Total .	3,872	15	3,887 in 1937, as compared with 7,301 in 1936.

The daily average number of persons employed in coal mines was 171,149, which is 8,232 more than the number employed in 1936. Of these persons 46,192 were males employed in cutting coal, 24,356 were males employed as loaders of coal and 22,887 were women.

The increase in the daily average number of persons employed in coal mines in 1937, as compared with 1936, is reflected in the larger quantity of coal produced.

Annual returns are now received of the number of persons actually at work and also of persons who should ordinarily have been at work but were absent on a selected day in February of each year. The returns relate only to coal mines. The day to which the returns apply must be the day of a

week selected by the Chief Inspector in which there is the largest turn out of workers For February 1938 the week selected by me was as follows —

Bengal Bihar and Orissa	13th to 19th
Assam Baluchistan the Central Provinces and the Punjab	6th to 12th

Although these returns are for a day in 1938, they are included in this report as they would be more than a year out of date if held over till the submission of the report for the year in which they are made

The returns for 1938 show that on the day selected 266 571 persons were either at work or were prevented from attending work This figure is 95 422 more than the average number of persons employed in coal mines during 1937 Three of the important district comparisons are as follows —

	Average daily attendance	Attendance on selected day (absentees included)	Excess over average daily attendance	Percentage excess
Jharia Coalfield	71 [illegible]	115 [illegible]	41 217	[illegible]
Raniganj Coalfield	57 843	87 683	29 840	51 6
Central Provinces Coalfield	11 918	16 360	4 [illegible]	37 3

Some of the percentages of absentees are as follows —All mines from which returns were received 8 2 Jharia 3 0 Raniganj 7 9 and the Central Provinces 7 7 It is probable that the reason for the low percentage of absentees in the Jharia coalfield is that a larger proportion of the labour force is resident at or near the mines than in the other areas A detailed statement compiled from the returns is given in Appendix I Table No 1 A It may be noticed that the percentage of excess of labour on the selected day in February over the average daily attendance in the Jharia coalfield has increased from 12 18 to 55 51 and in the Raniganj coalfield from 12 98 to 51 60 while in the Central Provinces it has increased from 26 88 to 37 35 The output of coal in the Jharia coalfield during that month increased by 27 per cent and the difference in proportion to the increase of labour may be attributed to two reasons —

(1) the removal of overburden in the process of forming extensive quarries during which period no coal was raised, and (2) to the recent re opening of collieries A typical example in the former case is one in which the labour figure last year was 379, while the labour employed this year at the same colliery increased to 2,501, and in the latter case at a colliery which was re opened the labour employed this year being 1 856, while last year it was *nil* In the Raniganj field the increase in the percentage of labour is in keeping with the increased output of coal during that month so also in the Central Provinces coalfield It should be pointed out that February is probably the busiest month of the year i e the month in which labour is most plentiful and that the figures for average daily attendance do not include absentees

Figures showing the average output of coal per person employed are given below:—

	Tons of coal per person employed.			
	Underground and in open workings.		Above and below ground.	
	1937.	1935-36.	1937.	1935-36.
British India	189	182	131	129
Bengal and Bihar	192	186	132	131
Assam	169	150	117	105
Baluchistan	42	41	41	41
Central Provinces	175	163	126	117
Orissa	198	203	146	151
Punjab	110	113	69	74

There was a general increase in the average output of coal per person employed except in Baluchistan and Orissa. In comparing the figures with similar figures in other countries it should be remembered that both men and women are employed in Indian coal mines. In 1936 the output of coal per person employed above and below ground in the United Kingdom was 298 tons. In the same year, *i. e.*, 1936 comparative figures in certain other countries were Japan 207 tons; France 210 tons; Germany 311 tons; and the United States of America 671 tons.

The number of persons employed in metalliferous (including mica, stone, clay and salt) mines was 96,709 which is 9,967 less than the number employed in 1936. 71,313 were men and 25.396 were women. Of the women 15 worked underground in salt mines.

Bengal, Bihar and Orissa.—At the beginning of the year there was a shortage of labour on account of the good harvest season. Many colliery owners were compelled to transport the miners from their villages in buses in order to obtain the necessary labour. Wages were increased by as much as 25 per cent. at some collieries, necessitated by the elimination of female labour from the underground workings of mines on 1st October. Towards the end of the year the supply of labour was ample. The relations on the whole between employers and labour continued to be good. At one colliery there was a partial strike for increased rates which lasted for three days.

The general health of the mining population in the Jharia and Raniganj coalfields was on the whole satisfactory. The death rate per thousand persons was lower both in the Raniganj and Jharia Mining Settlements. Details of the activities of the Mines Board of Health in the Raniganj and Jharia coalfields are given in Section V of this report, from which it will be seen that the work of both the Boards is being satisfactorily maintained.

In the iron ore mines of Singhbhum district there was no shortage of labour during the year. There was a further increase in the miners' wages,

due to an increase in the rates and an increase in the output per head Apart from a minor strike which lasted one day there was no further labour trouble

At the copper mines worked by the Indian Copper Corporation Limited in the Singhbhum district, there was an ample supply of labour A lightning strike for three days occurred in April at the smelter Labour unrest was a conspicuous feature during the year but it abated towards the end of the year There was no outbreak of epidemic disease

At the mica mines of Chota Nagpur there was an insufficient supply of labour Most of the labour was attracted to dump work by the high rates offered There was no epidemic or strike during the year

Assam —There was a sufficient supply of labour and there were no strikes or epidemics The use of water proofed safety helmets was continued and two hundred helmets were supplied free of cost to the miners during the year

Central Provinces —In the Pench Valley coalfield there was a shortage of labour on occasions and particularly in the months of October and November following the elimination of females from the underground workings of mines There was a slight increase in the rate of wages The prices of food stuffs remained much about the same The relations between the employers and labour were good On the whole the general health of the labourers was good

At the manganese mines in the Central Provinces there was a heavy demand for ore during the middle part of the year and the opening of a large number of small mines resulted in a large demand for labour and a general tendency for wages to rise There were no strikes or labour disputes There was an epidemic of cholera at one mine resulting in 73 attacks and 25 deaths There were no other outbreaks of epidemic disease

Punjab —There was no change in the labour conditions the supply exceeding the demand There was no epidemic and the health of the labourers remained satisfactory A lady doctor and a Sanitary Inspector were employed to supervise the welfare of the labourers and improve sanitary conditions The rainfall was again below the average but there was no shortage of water during the year

Madras —There was a plentiful supply of labour at the mica mines during the year Increased wages were paid as a result of the increased demand for mica The relations between employers and labour were good

In the table on page 6 figures are given of the average daily wages paid in December in each important mining field in India If the figures are compared with those in last year s Annual Report it will be seen that there was a general increase in the wages paid to underground miners in all the coalfields There were also small increases in wages paid to other classes of labour in practically all the coalfields

Average daily earnings in December 1937.

Mineral Field.	Underground.						Open workings.						Surface.			
	Overmen and Sirdars — Foremen and Mates.	Miners.	Loaders.	Skilled Labour.	Unskilled Labour.	Females.	Overmen and Sirdars — Foremen and Mates.	Miners.	Loaders.	Skilled Labour.	Unskilled Labour.	Females.	Clerical and Supervising Staff.	Skilled Labour.	Unskilled Labour.	Females.
	R a. p.	R a. p.	R a. p.	R a. p.	R a. p.	R a. p.	R a. p.	R a. p.	R a. p.	R a. p.	R a. p.	R a. p.	R a. p.	R a. p.	R a. p.	R a. p.
Jharia Coalfield (Bihar)	1 2 3	0 9 3	0 8 0	0 10 3	0 7 0	..	0 14 6	0 8 6	0 6 9	0 8 3	0 6 3	0 5 3	1 3 0	0 10 0	0 6 6	0 4 6
Raniganj Coalfield (Bengal).	1 0 0	0 9 0	0 7 9	0 9 6	0 7 0	..	0 11 3	0 8 0	0 6 6	0 7 3	0 7 6	0 4 9	0 15 9	0 9 0	0 6 3	0 4 0
Giridih Coalfield . .	2 4 0	0 10 3	0 9 0	0 12 6	0 7 9	..	..	..	..	0 7 0	..	0 4 0	1 13 3	0 13 3	0 7 9	0 4 3
Assam Coalfield . .	1 4 6	1 1 0	1 0 0	1 2 6	0 13 6	..	1 0 0	0 15 0	0 10 0	..	..	..	2 0 0	0 14 0	0 11 0	0 7 0
Punjab Coalfield .	1 1 6	0 15 9	0 14 0	0 12 6	0 7 3	..	0 10 6	1 0 0	..	..	0 6 0	..	0 13 9	0 11 0	0 7 6	0 3 0
Baluchistan Coalfield .	1 9 0	0 10 3	0 10 6	0 12 9	0 8 0	..	..	..	..	..	..	..	0 15 6	0 11 9	0 8 6	..
Pench Valley Coalfield (Central Provinces).	1 2 9	0 11 9	0 7 3	0 10 6	0 7 0	..	0 15 0	0 9 3	0 5 0	0 9 0	0 5 6	0 3 3	1 1 0	0 9 3	0 6 3	0 3 9
Bihar Mica . .	0 9 6	0 7 0	..	0 7 0	0 4 9	..	0 8 0	0 5 9	..	0 5 3	0 4 3	0 2 9	0 13 9	0 7 0	0 5 3	0 4 0
Madras Mica . .	0 7 9	0 5 6	..	0 4 9	0 4 3	..	0 9 3	0 5 0	..	0 4 6	0 3 9	0 3 3	0 11 3	0 5 0	0 4 9	0 3 6
Central Provinces Manganese.	..	0 7 0	..	0 9 0	0 5 6	..	0 12 3	0 5 6	..	0 7 3	0 4 0	0 4 3	1 1 0	0 10 6	0 5 3	0 3 6
Central Provinces Limestone.	..	..	..	..	..	..	0 9 3	0 6 9	..	0 6 9	0 4 3	0 2 0	0 5 3	0 5 3	0 3 3	0 3 3
Bihar Iron . .	..	..	..	..	..	..	0 14 0	0 5 0	..	0 10 3	0 5 3	0 3 0	1 5 0	0 12 0	0 4 3	0 3 0
Punjab Salt . .	6 3 3	2 6 0	..	1 1 0	0 9 6	..	..	..	..	..	..	..	0 13 9	1 0 0	0 7 6	..
Bihar China clay. .	0 8 9	0 5 0	..	..	0 2 3	..	0 5 0	0 3 3	..	0 5 0	0 6 3	0 10 9	1 3 3	0 6 0	0 3 6	0 2 6
Punjab Slate . .	..	..	..	..	..	..	0 8 9	0 6 6	..	0 5 0	0 4 3	..	0 13 0	0 12 3	0 6 0	..
United Provinces Stone	..	..	..	..	..	..	0 7 6	0 7 3	..	0 5 6	0 4 0	0 3 3	0 11 3	0 3 0	0 11 0	0 2 0

Section II.—Output of Minerals

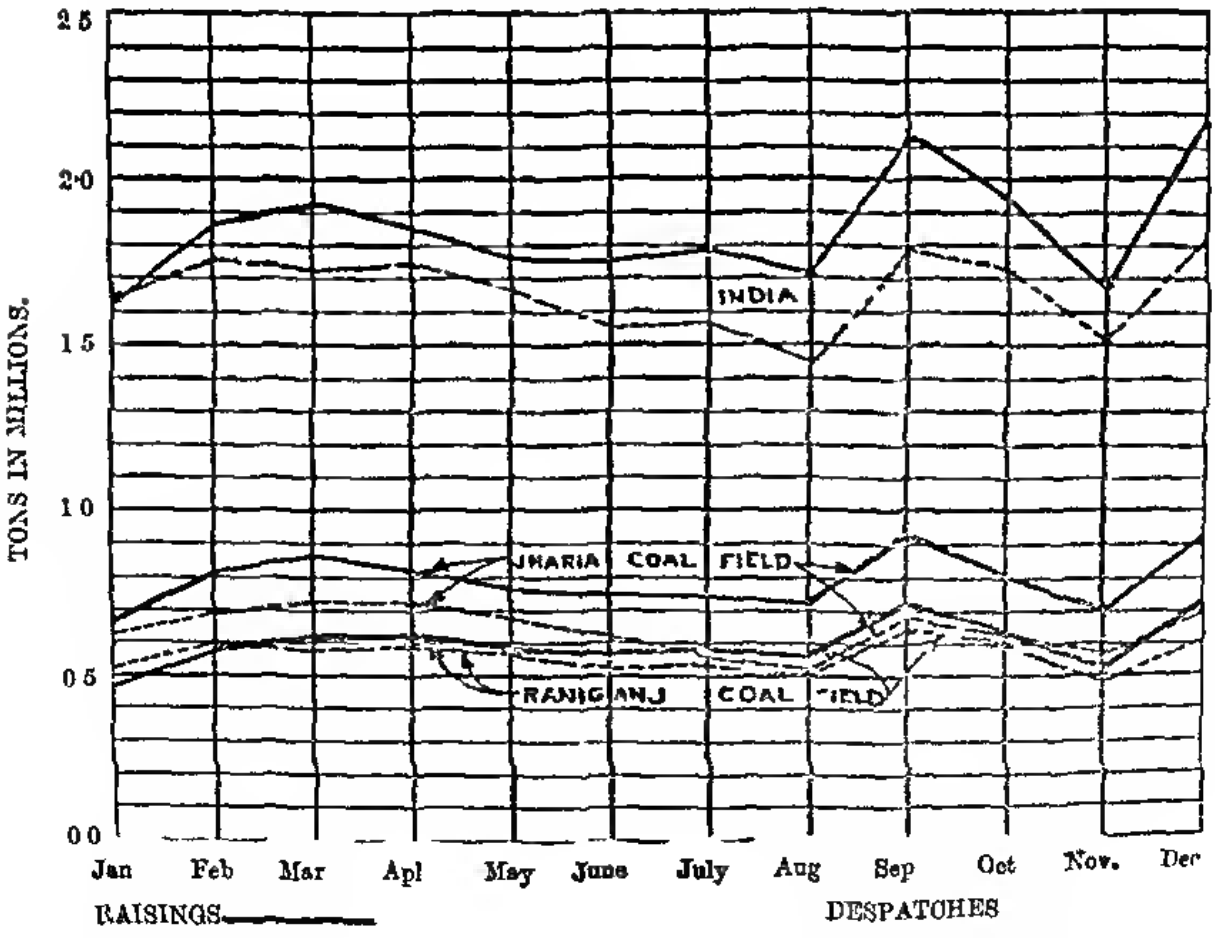
COAL

Output—The statement given below shows the output of coal in the various provinces in British India during the years 1936 and 1937

	Output in tons	
	1937	1936
Assam	243,650	201 591
Baluchistan	10,621	3,451
Bengal	6 527,820	6,667,841
Bihar	13,835 516	12 015,205
Central Provinces	1,504 159	1,507,982
Orissa	47,127	31 061
Punjab	166,632	156,849
Total	22,335,528	20,583 982

The total output in 1937 was 22,335,528 tons of a declared value of Rs 6,98,79,139 The increase in the output was 1,751,546 tons, *i e*, 8 51 per cent and the increase in the value Rs 1,38,94,100, *i e*, 24 82 per cent The opening stocks in 1937 were 896,723 tons and the closing stocks 824,021 tons In the charts which appear below the raisings and despatches of coal are shown month by month —

RAISINGS AND DESPATCHES OF COAL MONTH BY MONTH IN 1937



It will be seen from the chart that, as usual, the output was highest in the first three months of the year. The fall of output in November was greater than usual due to a plentiful harvest.

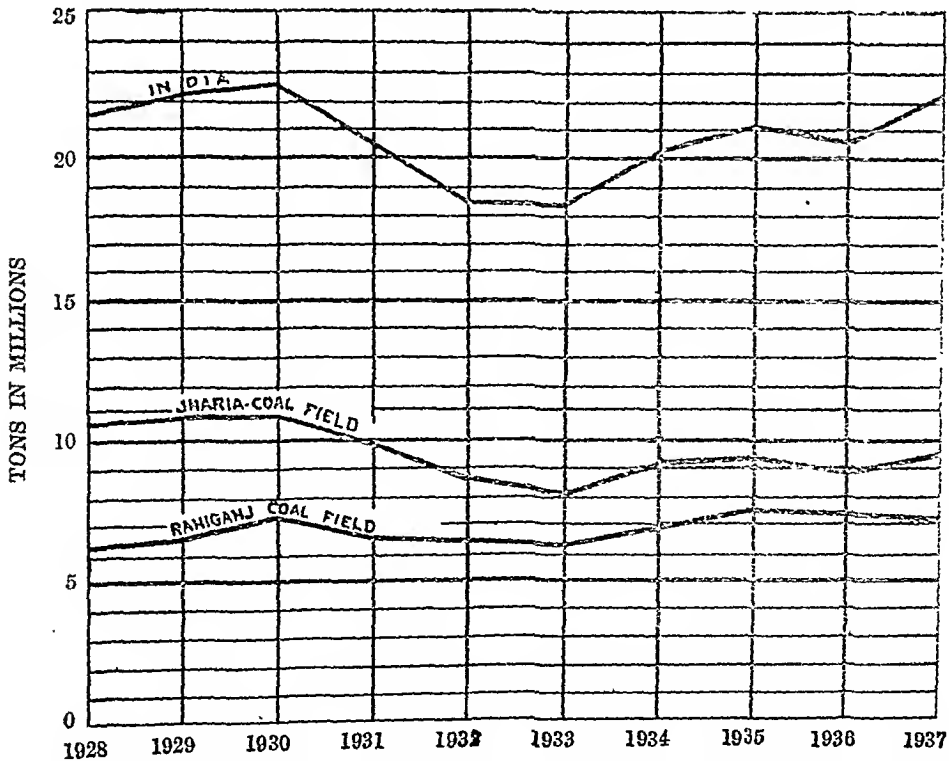
The output in Bihar increased by 1,820,311 tons; there was an increase of 16,066 tons in the Province of Orissa; and in Bengal there was a decrease of 140,021 tons. In the Central Provinces the output decreased from 1,507,982 tons to 1,504,159 tons. There were increases of 9,783 tons in the Punjab, and 7,173 tons in Baluchistan. There was an increase of 42,057 tons in Assam.

The figures of output for the principal coalfields are as follows :—

Coalfield.	1937.	1936.	Percentage increase + or decrease —
Jharia	9,601,230	8,830,144	+8·73
Raniganj	7,196,324	7,305,437	—1·49
Bokaro	2,309,170	1,417,227	+62·93
Giridih	674,794	698,133	—3·34
Karanpura . . .	534,328	396,083	+34·90
Pench Valley . . .	1,234,233	1,259,133	—1·98
Assam	243,650	201,593	+20·86

The output of the Jharia coalfield increased by about 8¾ per cent., the Raniganj coalfield decreased by about 1½ per cent., the Karanpura coalfield increased by about 35 per cent., and the output of the Assam coalfield by more than 20 per cent. There was a decrease in the Pench Valley coalfield of the Central Provinces of 2 per cent. and in the Bokaro coalfield an increase of 63 per cent. In the Giridhi coalfield the output fell by 3⅓ per cent. The accompanying chart shows the variation of the output of coal during the period 1928-1937.

CHART SHOWING OUTPUT OF COAL DURING THE PERIOD 1928-37.



Despatches —The despatches of coal were 19 942,554 tons and 1,192,793 tons, or 5 34 per cent of the raisings were consumed on the collieries The quantity of coal used for coking at the collieries was 1,272,883 tons, and 837,145 tons of soft coke and 95,439 tons of hard coke were made There was a decrease i e , 8 7 per cent in the quantity of soft coke manufactured at the collieries for domestic consumption The quantity of hard coke made at the collieries is small Most of the hard coke is made at coke making plants which do not come under the Mines Act, and 1,928,752 tons of coal were despatched to coke making plants of this kind in 1937 This quantity is 93,755 tons more than in 1936 Analyses of the figures relating to the output of coal and the manufacture of coke will be found in Appendix I, Table No 3

The despatches of coal for the year were more than those for 1936 by 1,719,420 tons The stocks of coal at the collieries at the end of the year were less than at the beginning

The following figures giving the average value per ton of coal put into wagons in various districts may be of interest —Assam, Rs 8 annas 2 3; Baluchistan, Rs 6 annas 12 3; Bengal, Rs 3 annas 6 3, Bihar (Jharia coalfield), Rs 3 annas 8 6, Central Provinces, Rs 3 annas 8; and the Punjab, Rs 5 annas 2 5 There were increases in the average per ton of coal in Baluchistan, Bengal, Bihar and the Punjab of annas 13 4, annas 11 5, annas 4 2 and Re 1 annas 3 7, respectively In Assam and the Central Provinces there were decreases of Re 1 annas 4 2 and annas 1 4, respectively

Trade Conditions —The demand for coal was good throughout the year From April until the end of the year prices increased while the supply of coal could not meet the demand Enquiries from overseas could not be met and the outlook, until December, was excellent, when the market was slightly weaker, but with forward commitments made at favourable prices for most classes of coal The contract for the Ceylon Government Railway was retained by the Indian coal owners

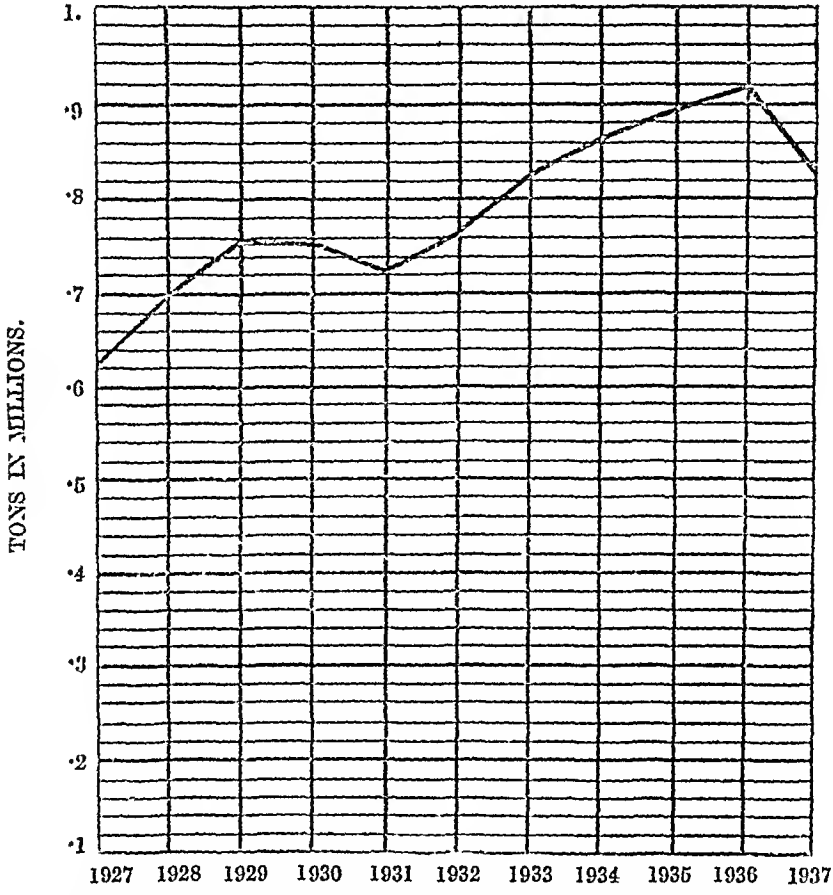
[illegible]

The Soft Coke Cess Committee continued as on previous years to carry [illegible] l, and its [illegible] for insp[illegible]

The question of improving the quality of soft coke is still [illegible] attention of the Committee During the year the prices of soft coke [illegible] very high due to a shortage of coal and coke and despatches were [illegible] affected Approximately 830,784 tons of soft coke were [illegible] the coalfields in the year 1937, as compared with 915,719 tons [illegible] 1936 Out of the output for 1937, 786,125 tons were despatched [illegible]

in the Jharia coalfield. The accompanying graph shows the development of the soft coke industry during the last ten years.

DESPATCHES OF SOFT COKE FROM 1927 TO 1937.



Use of Electricity both at Coal Mines and at other mines.—The number of coal mines using electrical energy was 124, the same as in 1936, but the aggregate horse power employed at coal mines increased from 84,168 to 86,804, *i. e.*, by 3·1 per cent. The increase is due to the increased horse power of motors installed chiefly in the Jharia, Raniganj and Central Provinces coalfields. During the [illegible] electrical plant was installed and brought into operation in thre[illegible] mines and was withdrawn from three other mines. Of mine[illegible] re-opened and three were closed.

Electricity was used at 2[illegible] mir[illegible] [illegible]1 mines in 1936, and the aggregate ho[illegible] wa[illegible] 13,479 in the [illegible] year, sho[illegible] t.

St[illegible] electrical [illegible] nces of E[illegible] in certa[illegible] I, Tabl[illegible].

Explosives—During the year 2 751,418 lb of gunpowder, 61,840 lb of high explosives, and 220 519 lb of 'permitted explosives were used at coal mines These figures compare with 2,181,106 lb of gunpowder 45,237 lb of high explosives and 95 078 lb of 'permitted' explosives used in 1936 In addition 112 881 lb of liquid oxygen explosives were used These explosives were used in quarries in the Bokaro coalfield A statement of the kind and quantity of explosives used during the year in the different kinds of mines under the Act is given in Appendix I, Table No 12

An appendix has been added giving a list of "permitted' explosives and a list of approved types of shot firing appartus

Coal Cutting Machines—The number of coal-cutting machines in use was 140, as compared with 110 in 1936 All the machines were worked by electricity 46 machines were at work in Jharia coalfield 78 machines in the Raniganj coalfield, 5 in Karanpura coalfield 1 in Giridih coalfield, 1 in Bokaro coalfield and 9 in the Central Provinces There has been an increase of eight machines in the Jharia coalfield and of fifteen machines in the Raniganj coalfield Coal cutting machines were in use in 50 mines as against 39 mines in 1936, the total area undercut was 6 890 160 square feet, as compared with 5 357,389 square feet undercut in 1936 There has thus been a considerable increase in the output obtained in many mines from the use of machines The re introduction of coal cutting machines during the year in some of the mines from which they were withdrawn during the depression period is due partly to the increased price of coal and partly to shortage of labour in mines

Electricity Rules—New Rules known as Indian Electricity Rules, 1937, were brought into force during the year The new rules contained many additions to the Indian Electricity Rules 1922, since superseded The existing installations are being brought into conformity with the requirements of the new rules

Supervisors Examinations—During the year the Government of Bengal brought into force Rule 48 of the Indian Electricity Rules 1937 in the sub division of Asansol and now requires that no electrical installation work including additions, alterations and repairs to existing installations shall be carried out in mines except under the direct supervision of a person holding a certificate of competency issued by it The Bengal Government appointed a Licensing Board for the purpose of issuing Supervisors' Certificates of Competency to qualified persons and framed regulations for the purpose Examinations for Supervisors Certificates of Competency were held in Calcutta and at Dhanbad and several persons employed in mines have received certificates by examination Also many Engineers in responsible positions in mines have been granted certificates in consideration of their experience and qualifications

Mechanical Ventilators—In Appendix I Table No 10, particulars are given of the number of mechanical ventilators in use in coal mines under the Act In 1937, 117 mechanical ventilators were in use, the number being 104 in the previous year

Safety Lamps—In Appendix I Table No 11 particulars are given of the number of safety lamps in use in coal mines under the Act 42,932 safety lamps were in use in 1937, as compared with 33 051 in 1936

Iron Ore.

The production of iron ore was 1,587,362 tons, valued at Rs. 27,20,67,[illegible] compared with 1,401,530 tons, valued at Rs. 22,81,834 in 1936.

Manganese Ore.

There was an increase of 175,150 tons in the output of manganese ore, the figures of production being 800,280 tons, valued at Rs. 1,21,06,503, as compared with 621,830 tons, valued at Rs. 49,62,272 in 1936. The average reported value per ton of manganese ore produced rose from Rs. 7·91 in 1936 to Rs. 15·13 in 1937. The corresponding value in 1935 was 9·52. The Central Provinces Manganese Ore Company, Limited, despatched a total of 751,367 tons as follows:- 276,021 tons to Calcutta; 311,748 tons to Vizagapatam; 43,831 tons to Bombay; and 92,761 tons of other sales on f.o.r. basis. The quantity despatched by the company in 1936 was 490,050 tons so that the despatches in 1937 were greatly in excess of those in 1936. The average f. o. b. price realised in 1937 was 8·28 annas per unit. It is [illegible] than the figures of the previous year. There was a strong demand for ore of all but very low grades from March 1937 until October 1937, when demand slackened somewhat due partly to high steamer freights and partly to buyers having satisfied their requirements.

Gold.

The output of gold in 1937 was 26 ounces which was obtained from the Manbhum district of Bihar.

Chromite Ore.

The production of chromite ore was 35,387 tons, valued at Rs. 5,13,[illegible] as compared with 28,142 tons, valued at Rs. 3,91,401.

Copper Ore.

The output of copper ore was 371,458 tons, valued at Rs. 48,69,790, as compared with 357,194 tons, valued at Rs. 40,03,200 in 1936. The whole of the production came from the mines belonging to the Indian Copper Corporation, Limited, in the Singhbhum district of Bihar. The production of refined copper amounted to 6,830 tons, as compared with 7,200 tons in 1936. The production of yellow metal sheet and circles at the rolling mills was 10,019 tons, involving the use of 6,422 tons of copper. Development of the Mosaboni and Dhobani mines is proceeding in depth.

Mica.

The quantity of mica consigned was 94,811 cwt., valued at Rs. 39,16,718, as compared with 82,077 cwt., valued at Rs. 32,33,396 in 1936. The output of dressed mica in 1937 was 103,641 cwt., as compared with 86,501 cwt., in

1936 In addition, 24,407 cwt of waste mica fit for splittings valued at Rs 91,737 were consigned from Nellore district Madras Presidency and 664 cwt, valued at Rs 210 from Ajmer Merwara district in Rajputana The output of this kind of mica was 28,863 cwt

The quantities of mica and splittings shipped in 1936 and 1937 are as follows —

	Cwt.	Rs.
1936 . .	99 491	72,57 054
1937	131 425	1 16,73 944

In addition 120,191 cwt of "pattern cut" and scrap mica having a value of Rs 9 63 873 were shipped as compared with 58,250 cwt valued at Rs 8,45,219

Rock-salt

The production of rock salt was 163,813 tons, as compared with 151,523 tons in the previous year

Limestone.

The reported production of limestone was 1 318 598 tons valued at Rs 13 88,468, as compared with 1 007 957 tons, valued at Rs 11 61,005 in 1936

Stone

Returns were submitted by the owners of one hundred and nine stone mines, and the figures of production were as follows —1 205,756 tons of igneous rock, 39,414 tons of sandstone 39 934 tons of gravel and 30 565 tons of murrum The total production was 1 315 569 tons, as compared with 1,338,160 tons in 1936

Clays

From the twenty six clay mines from which figures were obtained 33 332 tons of fire clay, 11,024 tons of china clay and 89,058 tons of ordinary clay were produced

Other Minerals

The production of other minerals were as follows —15 150 tons of bauxite, valued at Rs 61,839 7,446 tons of slate, valued at Rs 1,39 835 23,782 tons of magnesite valued at Rs 1,40,708, 13 932 tons of gypsum, valued at Rs 36,418, 7 591 tons of barytes valued at Rs 70 635, 2 554 tons of steatite, valued at Rs 14 490 112 tons of ochre, valued at Rs 903, 268 tons of felspar, valued at Rs 1 867, 166 tons of apatite valued at Rs 1,660 181 tons of kaoline valued at Rs 543, and 805 tons of kyanite, valued at Rs 12 075 Small quantities of asbestos beryl, graphite, fuller s earth, muscovite and tantalite were also produced

SECTION III.—ACCIDENTS.

During the year 1937 at mines regulated by the Indian Mines Act, 1923, there were 208 fatal accidents which is 6 less than in 1936, and 28 more than the average number in the preceding five years.

In addition to the fatal accidents there were 1,085 serious accidents involving injuries to 1,115 persons, as compared with 978 serious accidents involving injuries to 1,011 persons in the previous year. The so-called "serious" accidents reported are those in which an injury has been sustained which involves, or in all probability will involve, the permanent loss of or injury to the sight or hearing or the fracture of any limb or the enforced absence of the injured person from work for a period exceeding twenty days. Two hundred and forty-eight persons were killed and 1,156 persons were seriously injured. The latter figure includes 41 persons injured in fatal accidents. The number of persons killed was 229 less than in 1936. 228 persons killed were men and 20 were women. In one case 9 lives; in eight cases 3 lives and in fifteen cases 2 lives were lost.

The proportion of accidents which occurred to men and women, respectively, underground, in open workings, and on the surface were as follows:—

—	No. of fatal accidents.	No. of men killed.	No. of women killed.	Death rate per 1,000 persons employed.		No. of serious accidents.	No. of men injured.	No. of women injured.	Serious injury rate per 1,000 persons employed.	
				Men.	Women.				Men.	Women.
Underground .	169	189	10	1·59	2·57	815	825	15	6·94	3·86
Open workings.	25	29	6	0·60	0·25	66	54	17	1·12	0·69
Surface . .	14	10	4	0·19	0·20	204	186	18	3·55	0·90

There was a decrease in the death rate of men employed underground, in open workings and on the surface. With respect to women there was a decrease in the death-rate underground and an increase in open workings and on the surface. The causes of the fatal accidents have been classified as follows:—

—	No. of fatal accidents.	Percentage of total number of fatal accidents.
Misadventure	136	65·39
Fault of deceased	29	13·94
Fault of fellow workmen	9	4·33
Fault of subordinate officials	17	8·17
Fault of management	16	7·69
Faulty material	1	0·48
Total .	208	100·00

There was a decrease of 229 in the number of persons killed during 1937, as compared with 1936

I have analysed serious accidents and find that out of the total of 1,156 persons seriously injured 87 were permanently partially disabled and 1,069 were only temporarily disabled

In addition it was reported that 3 914 persons received minor injuries which necessitated the enforced absence from work for a period exceeding forty eight hours

Fire-damp —There were two fatal accidents by explosions or ignitions of fire damp involving the death of 2 persons

Falls of roof and side —Falls of roof and sides caused 116 fatal accidents and 190 serious accidents As compared with the figures under this head in the previous year the total number of accidents decreased from 378 to 306, the number of persons killed increased from 141 to 148, and the number of persons seriously injured decreased from 266 to 205 In one case three lives, while in another case two lives were lost in depillaring areas, also in two cases three lives and in nine cases two lives were lost in galleries by falls of roof The accidents by falls of sides include one in which nine persons were killed in open workings

In Shafts —There were 10 fatal accidents and 32 serious accidents in shafts, as compared with 7 fatal accidents and 21 serious accidents in the previous year

Suffocation by gases —There was one fatal accident due to suffocation by gases, involving the death of two persons

Explosives —There were 13 fatal accidents and 31 serious accidents caused by explosives In the previous year the figures were 11 and 24 respectively

Haulage —There were 32 fatal accidents and 218 serious accidents on haulage roads The accidents due to haulage have been classified as follows —

Classification	Fatal	Serious	Total
Haulage rope breaking . .	6	3	9
[illegible]		1	1
	1		1
.	2	5	7
		2	2
	2	2	4
.	7	21	28
	3	57	60
	.	8	8
	6	55	61
.		12	12
go	2	25	27
Crushed against tubs sides of roadways doors, etc	1	8	9
While spragging moving tubs .	1	7	8
Unclassified . .	1	12	13
Total	32	218	250

There was an increase in the number of accidents due to breakdown in materials, there being 11 in 1937, as compared with 6 in 1936. Of the 11, 9 were due to the breakage of haulage ropes. The prolonged use of haulage ropes showing signs of extensive deterioration is to be deprecated.

The number of accidents due to unauthorised persons riding on sets was 4 in 1937, as compared with 9 in 1936. Although there is a marked improvement, stricter supervision by the subordinate underground staff and disciplinary action by managers are necessary.

There was a considerable increase in the number of accidents resulting from tubs being allowed to run uncontrolled, there being 28 in 1937, as compared with 5 in 1936. Attention is drawn to the necessity of supplying a sufficient number of suitable sprags on the loading lines and on the insistence for their regular use. Stop-blocks and catches provided at suitable points on tramlines having variable gradients would reduce this class of accident.

There was an increase in the number of accidents while tubs were being hand trammed, there being 60 in 1937, as compared with 45 in 1936. There was also an increase in the number of accidents following derailments or while re-railing tubs, there being 61 in 1937, as compared with 26 in 1936. Accidents by these causes are generally due to ignorance or carelessness of the persons involved. In re-railing tubs suitable poles should be used as levers to guard against the danger of tubs capsizing on the persons engaged in re-railing the tubs.

The number of accidents to persons resting or loitering about haulage roads or tramming levels has increased from 23 in 1936 to 27 in 1937. Attention of owners, agents and managers is drawn to my Circular No. 4 of 1931, in the hope that the recommendations contained therein will be more rigidly enforced.

The number of accidents due to persons being crushed against tubs, sides of roadways, doors, etc., has been reduced from 25 in 1936 to 9 in 1937. A little more care on the part of those involved would reduce this class of accident.

Underground Machinery.—One fatal and nine serious accidents were caused by underground machinery.

Sundries Underground.—Nineteen fatal accidents and 404 serious accidents were due to miscellaneous causes underground.

Surface Machinery.—One fatal accident and 14 serious accidents were caused by surface machinery.

Surface Railways and Tramways.—Eight fatal accidents and 110 serious accidents took place on surface railways and tramways.

Electricity.—There were 2 serious and 2 fatal accidents attributable to the use of electricity.

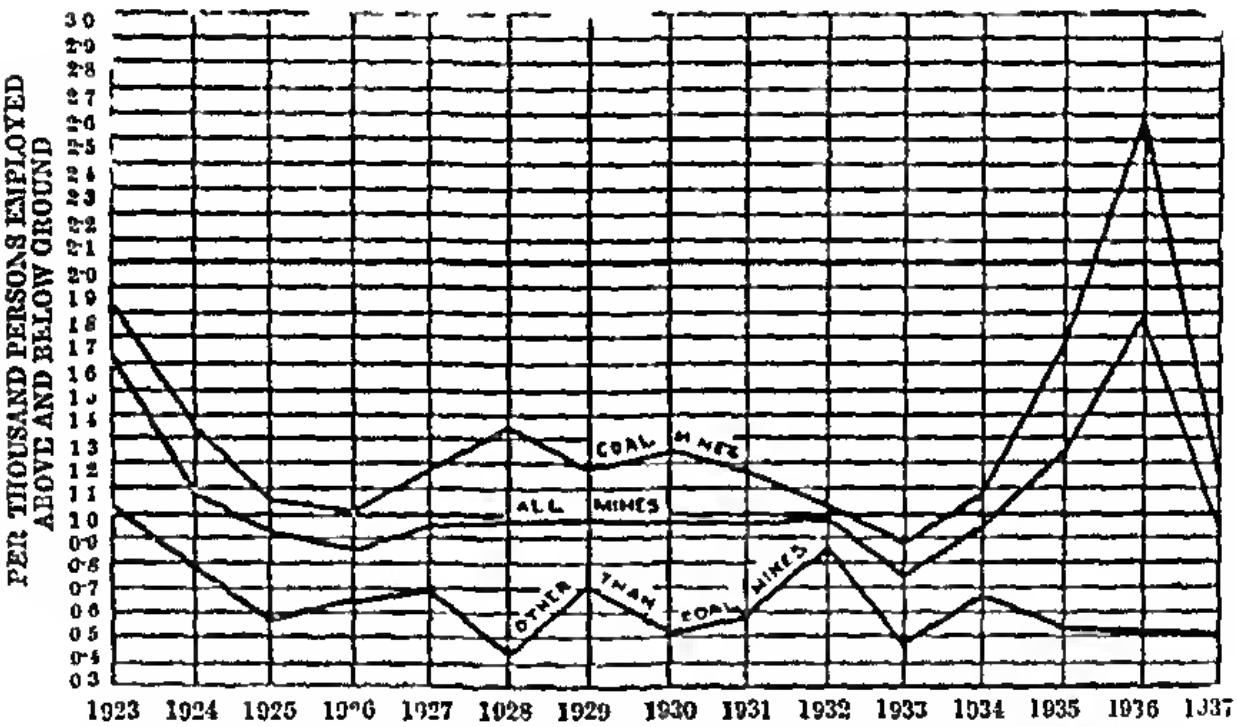
Miscellaneous on the surface.—Three fatal accidents and 75 serious accidents of this kind took place on the surface.

Accidents excluded from the statistics—Twenty four accidents causing 21 deaths were excluded from the statistics for reasons which are given in Appendix II

Death rates—The death rate per thousand persons employed above and below ground was 0 93 which was less than the rates in 1935 and 1936 The average rate for the preceding five years was 1 13 At coal mines the rate was 1 17, as compared with 2 58 in 1936 At mines other than coal mines the rate was 0 50, as compared with 0 53 in 1936

The chart below shows graphically the variation in the death rate during the period 1923 37

CHART SHOWING THE DEATH RATE
FROM ACCIDENTS DURING THE PERIOD 1923 1937



From the above it will be seen that the death rate has fallen considerably The high rate in 1936 was due chiefly to an explosion in a coal mine which caused the loss of 209 lives

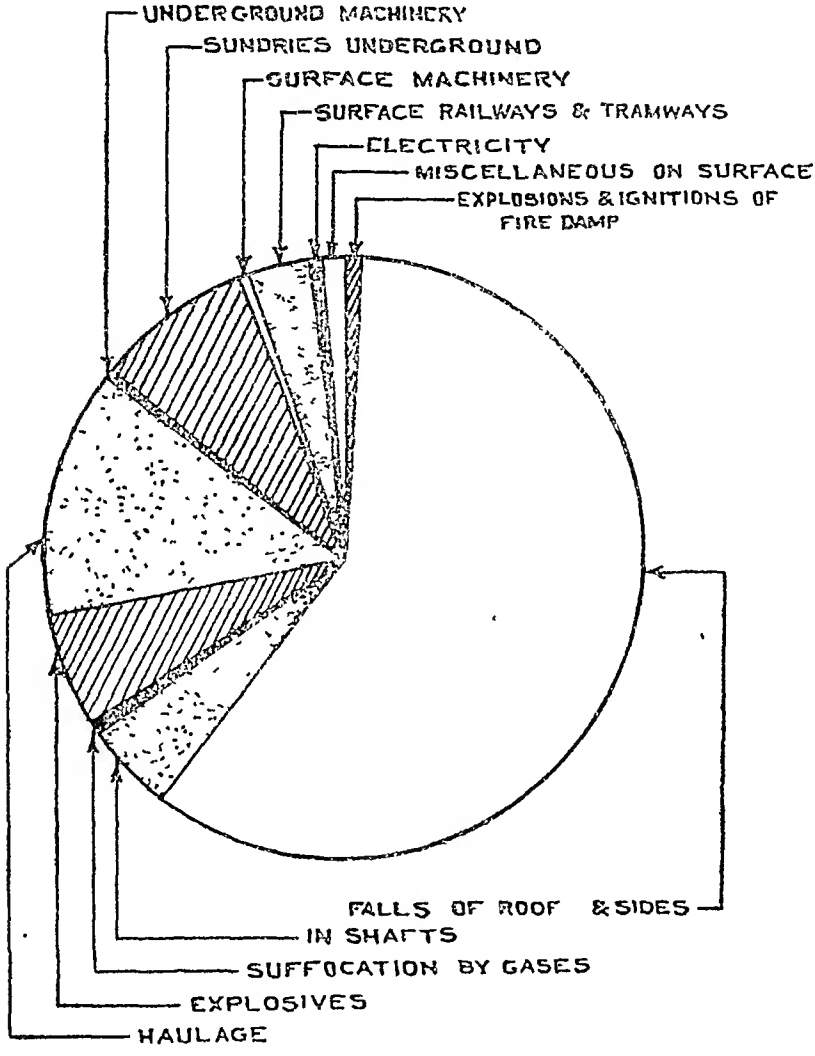
The death rate per million tons raised at coal mines was 8 95 while that of the preceding five years was 11 12

Deaths occurring in each class of mines were as follows —200 in coal mines, 2 in iron ore mines, 12 in mica mines 11 in limestone mines 4 in stone mines, 8 in copper mines 1 in a chromite ore mine, 4 in salt mines, 1 in a magnesite mine and 5 in manganese mines

Two persons lost their lives due to explosions and ignitions of fire damp, 78 persons lost their lives by falls of roof, 70 by falls of sides 12 in shafts, 2 by suffocation by gases, 15 by explosives 33 by haulage, 22 by other accidents underground, 2 by electricity and 12 on the surface

The accompanying chart shows the relative importance of the various cases of accidents in coal mines during 1937.

CHART SHOWING
DISTRIBUTION OF CAUSES OF PERSONS KILLED IN AND ABOUT COAL MINES IN THE YEAR 1937.



A list of the fatal accidents appears in Appendix II, Table I, where each is briefly described. The details of certain accidents are reported at greater length as follows :—

FALLS OF ROOF.

No. 63.—The Budroochuck Coal Mining Company, Limited's Budroochuck coal mine.

(Three persons killed and one injured.)

This accident occurred on a main dip haulage road in a development district of No. 14 seam which is 25 feet thick. The haulage road passes

through a series of faults and at place of accident it was against the roof and had been made 6 feet in height Plan No 1 shows the place of accident

The deceased and their companions were engaged in driving dip and rise galleries off the bottom level of the haulage road At the end of their relay they were proceeding outbye and just as they reached the place of accident the mass of roof as indicated on the plan fell without any warning The two assistant overmen in charge of the district stated that the roof that fell had been tested regularly and the last examination was made two hours before the accident when the roof appeared to be sound The roof of No 14 seam in this particular area varies considerably and on the rise and dip sides of place of occurrence supports had been set because of the unsound roof

In spite of the fact that the roof at place of accident was considered to be sound in view of the bad roof on the rise and dip sides it is considered that supports should have been set at the junction of the galleries as a precautionary measure The management agreed to timber systematically the junction of all galleries in this area where the roof was disturbed and likely to be unsound with a view to preventing a recurrence of this type of accident

Fall of Side

No 45 —The Dyers Stone Lime Company, Limited s Salaiya Paharhai Limestone mine

(Nine persons killed)

This accident occurred in a limestone quarry, 220 feet long and 100 feet wide Plan No 2 will indicate conditions before and after the accident

The quarry was a comparatively new one as it was opened in June 1936 The following description of the accident is given by Dr D Penman who enquired into the accident —

" The actual limestone deposit is overlain by a deposit of red earth and clay varying in thickness according to the position of the deposit the slope of the beds, and the erosion that has taken place in the limestone

[illegible] and gives an [illegible] The deposit [illegible] mestone beds varies within short distances both in degree and in direction Limeston is comparatively easily dissolved by running water and as a result the deposit has been 'leached or eroded out at intervals and these gaps filled by clay or earth in which pieces of limestone are embedded

The number of workers employed in the quarry varied from 200 to 400 persons according to the supply of labour The bulk of the labour was employed in carrying the limestone out of the quarry and removing the overburden In places the limestone had to be blasted

There were several pathways into the quarry—one on each of the south east and west sides and other pathways on the north side The quarry was not being extended on the south side and work in this part of the quarry

was confined to the removal of limestone from the floor of the quarry at a distance of about 15 feet from the face of the side which fell.

The south side of the quarry across a width of about 75 feet suddenly collapsed and the debris, consisting of blocks of limestone, earth and clay was debouched over practically the whole width of the quarry and for a distance of approximately 35 feet from the original face of the side at surface level. Nine persons—seven men and two women—were caught by the fall and either partially or completely buried by it. These nine persons were killed. Five bodies were recovered the same day, two were recovered on the 27th February, one on the 28th February, and one on the 2nd March.

Figure 5 shows the appearance of the place of accident after the fall and the approximate positions of the persons killed. Eight persons—five men and three women were injured. None of these persons appear to have been seriously injured and they are all expected to recover.

The accident was due to a collapse of the south side of the quarry as described. The collapse of the side was due to a number of factors as follows :—

(*a*) The character of the limestone deposit. The beds of limestone are lying at an inclination of between 20 and 25 degrees to the horizontal in a northerly direction. The limestone is not massive, *i.e.*, the deposit is not homogenious throughout. It consists of layers of limestone of varying thickness interlain with thin laminae of clay. The limestone beds are also broken up to some extent by joint planes. The upper surface of the limestone deposit is irregular in shape as is shown in Figure 2, and further the amount and direction of the inclination of the beds is not constant.

(*b*) There was and is a considerable thickness of red earth and clay lying on the limestone beds adding to the weight and thrust against the beds in the direction of the slope of the latter. There exists little cohesion between the earth and clay and the limestone beds.

(*c*) On one side of the fall there was a well pronounced joint plane with greasy surfaces. This plane is shown in Figures 1 and 5.

(*d*) On the other side of the fall the limestone had been leached out or eroded so that the thickness of the red earth and clay overburden was thicker at that side than on the side next the joint plane mentioned in (*c*).

(*e*) There had apparently been heavy rain on the night of the 25th February—the night before the accident. This rain may have and probably did contribute to the collapse by lubricating the joint plane mentioned, the joints and bedding planes of the limestone and by softening the superficial earth and clay. The side was released by the pronounced joint plane already mentioned and by the cutting of the limestone in the deeper part of the quarry. The weight of red earth and clay pressing against the limestone caused the latter to slip with the result that there was a general sliding of the limestone downhill and a subsequent collapse of the overburden.

All the witnesses examined stated that there was no indication of a fall likely to take place The manager stated that he was at the place at 2 30 p m —about an hour before the accident and did not notice anything wrong There was no sign of any movement and no one said to him that there was

signs of an imminent fall If the same conditions had prevailed on the north, east or west side of the quarry such a fall would not have occurred as on the north side the limestone beds dipped away from the place of work and on the east and west sides the beds of limestone lay in a horizontal direction

Regulation 38 of the Indian Metalliferous Mines Regulations requires that "the sides of open workings shall be sloped stepped or secured in such a manner as to prevent danger from falls of material

There was a travelling foot path on the face of the side which fell so that at one part of the side the face was stepped twice (see Figure 4)

The foot path appeared to be of the requisite width as required by Regulation 41 A of the Indian Metalliferous Mines Regulations But I do not consider that the foot path amounted to stepping the sides as required by Regulation 38 The foot path was sloping and while it might have constituted a suitable "step" at its beginning it did not so conform at its end and for a considerable part of its length Moreover, the foot path did not extend over the whole length of the face but only a part of it

The sides of the excavation were sloped only very slightly as may be seen from the sketches Figures 2 and 3 (Plan No 2) and I do not consider them to have been adequately sloped

The amount of stepping or sloping of the side of an excavation depends on the nature of the ground If the ground is throughout of hard stone and not highly inclined very little slope may be necessary to secure safety But if the ground is soft and the deposit is in layers and highly inclined as in this case, very considerable slope or definite and frequent stepping is necessary Such sloping or stepping had not been done

Proceedings were instituted against the agent and the manager

As a result of this accident a code of [illegible] of the slope of the sides and the nature of [illegible] might be considered adequate, was issu[illegible] No IV, Statement No 19) to the owners of this mine and to the owners and agents of all other working limestone mines

IN SHAFTS (WHILST ASCENDING OR DESCENDING BY MACHINERY)

No 167 —The Bengal Coal Company, Limited s Bankimulla (Nos 7 and 8 pits) coal mine

(Three persons killed)

This accident occurred at a shaft, 16 feet diameter and 925 feet deep at which sinking had just been finished This shaft passes through two important seams—the Koithi and the Ponati

and he was coughing frequently The doctor administered smelling salts but he expired at 9 30 P M The remaining fourteen men were removed to Dhanbad hospital at about 11 45 P M where they were kept as in patients for observation As the condition of Akal Majhi Dhanu Dhobi and Dhanu Routh was precarious, oxygen was administered and their condition improved under this treatment Akal Majhi, however, died four days later but the other thirteen patients recovered

The accident was clearly due to absorption by the deceased and the injured persons of nitrous fumes Nitrous fumes are produced when certain nitro glycerine explosives are fired particularly if the detonation is not complete, and some of the explosive burns instead of detonating These fumes have an extremely irritating action upon the respiratory passages and are highly poisonous The extreme symptoms do not usually manifest themselves for several hours after exposure and during the early stages of exposure to the fumes n persons may feel ill and cough violently after which he appears to recover Several hours later, however more pronounced symptoms make their appearance their intensity depending upon the degree of exposure to the fumes If large quantities have been inhaled bronchitis and pneumonia may develop and death may ensue within forty eight hours Nitrous fumes are very soluble in water

The staff in charge of the shaft sinking was thoroughly experienced The petty contractor had sunk no less than five other shafts The charge man was also an experienced shaft sinker In addition to the chargeman there was a fully qualified overman who examined the shaft before the sinkers descended after blasting but as he did not remain in the shaft for any considerable time he was not affected

This is an unusual type of accident but in order to guard against a recurrence it is considered that artificial means of ventilation should be introduced when sinking shafts extend beyond a depth of 100 feet

BY EXPLOSIVES

No 102 —Messrs Anandamoyee Coal Company s Khas Jinagora coal mine

(Three persons killed and two seriously injured)

This accident occurred while preparations were being made for blasting in a gallery in the middle section of No 10 seam It appears that about 5 lb of loose gunpowder had been taken to the place According to the evidence of the overman in charge of that part of the mine three persons were set to drill holes to blast down a stone band in the roof Work was commenced at about 9 A M on day of accident and at about 2 A M the overman found that three holes had been drilled but the shot firer had not arrived to conduct blasting operations When the overman visited the place later he noticed that one of the men was charging a hole and the shot firer with two other men was sitting on the floor of the gallery and a canister was placed between them The lid of the canister had been removed and the overman saw paper casings in the form of cartridges

There were two lighted "mug lamps"—one on each side of the canister and only a short distance from it. The shot-firer was close to the canister and he was smoking a "biri".

From the evidence recorded by the officer who investigated this accident it is evident that cartridges of gunpowder were being prepared at the site of the accident. The shot-firer, who subsequently died as a result of his injuries sustained at time of accident, admitted taking loose gunpowder into the mine.

It seems that a "mug lamp" was suspended from the roof for better illumination while a hole was being charged, and that this lamp fell from the roof to a point near the canister where some loose gunpowder was ignited, resulting in the accident.

Accidents of this nature are easily avoided by exercising reasonable care and complying with the Coal Mines Regulations. Regulation 102 requires that gunpowder shall not be issued for use in blasting operations in a mine or used in a mine, except in the form of cartridges.

Criminal proceedings were instituted against the manager and the magazine-keeper.

SUNDRIES UNDERGROUND.

No. 6.—The Raneegunge Coal Association Limited's Kustore coal mine.

(Two persons killed and three injured.)

This accident occurred in No. 13 seam at a point where coal is delivered into a bunker from No. 15 seam. The coal is loaded into 15 cwt. capacity tubs in No. 15 seam and then taken to the top of a chute which consists of a vertical shaft, 6 feet diameter and 118 feet deep, between 13 and 15 seams. From the bottom of the shaft an inclined drift, 7′ × 7′ and 138 feet long on a slope of 1 in 1 leads to a large bunker situated in 13 seam. The coal in the 15 cwt. tubs is delivered into the vertical shaft through a tippler and then falls into the bunker below where it is loaded into 3-ton mine cars. The Inspector of Mines, No. 1 Circle, who enquired into this accident gave the following description of the accident :—

"The bunker is a composite structure of steel plates, girders and brick-work. Sometime during the night shift of 6th-7th January it was found that a jamb had occurred in the shaft or drift and coal was not falling into the bunker after being delivered from No. 15 seam. The assistant manager was informed of this at 6 A.M. on 7th January and after reporting the matter to the manager he proceeded to No. 15 seam to arrange for water to be run into the chute in order to loosen the coal causing the jamb. Instructions had previously been sent to the staff at the bunker to stand clear until the coal was loosened. Water was run into the shaft for about fifteen minutes without result, and the assistant then stopped the water and proceeded to 13 seam in order to ascertain conditions at the bunker end. On the way he was informed that the coal had fallen away and on arriving at the bunker found coal and water falling past the slide gate which was open. The gate was closed and the water allowed to escape through the perforations in the plate. Accompanied by the head fitter the assistant then inspected the bunker. They both affirm that they found everything in order and that the side walls had

not been damaged in any way by the fall of coal. The assistant then gave orders for loading to commence and stood by until eleven mine cars, representing 33 tons of coal, had been loaded and drawn away. After giving orders for no more coal to be dumped from No. 15 seam until he had an opportunity to examine the shaft and incline he left the place. Following the assistant's departure three more mine cars were loaded. As the fifteenth car was being loaded there was a sudden loud noise of coal falling into the bunker and the south wall of the bunker burst open, precipitating coal on the tram line below. There were six persons working in the vicinity, of whom only one escaped injury. Two of the remaining five were buried beneath the broken wall and coal and were killed instantly, while the other three sustained serious injuries. Following the accident it was found that about 10 to 12 tons of coal had fallen from the bunker on to the tram line. Among the loose coal was a steel girder. It appears that during the sinking of the shaft girders were fitted into the sides in order to provide seatings for a pump. Two or three of these girders were left in the shaft after the commencement of dumping operations. In my opinion the girder which was found with the coal was the cause of the coal jamming in the shaft for it is probable that the coal was held up by the girder which had fallen from its original position and was jammed at the junction of the shaft and drift."

Since the bunker had been put into use in April 1936 approximately 30,000 tons of coal had passed through it at time of accident. On at least two occasions the bunker and the shaft incline above had been filled with coal up to No. 15 seam, and the bunker had proved strong enough to withstand the pressure. The Inspector of Mines considered that the coal which caused the damage amounted to about 10 tons and probably fell from a height of 128 feet down a slope of 1 in 1.

The south wall of the bunker was 21 inches thick, built of box bricks in cement and sand and erected on two 12 inches girders laid side by side. Retaining walls had also been built up to the level of the girders but they formed no support to the wall itself.

Since the accident all the girders in the shaft have been removed and the bunker strengthened. Although this accident could not be foreseen, it clearly indicates the necessity to keep shafts and drifts, which are used for work of this nature, clear of all [illegible]

SECTION IV.—Prosecutions and amendments to the Act, Regulations, Rules and Orders made thereunder.

Prosecutions.

During the year [illegible]

Two [illegible] fined for [illegible] a registered [illegible] tion book and for [illegible] the underground work [illegible] as the other [illegible]

Two miners of a coal mine in the Jharia coalfield were prosecuted for working in a place in which they had not been ordered to work and for cutting coal from a pillar without authority. The case was withdrawn as the accused could not be traced.

The late manager and the assistant in-charge of the magazine of a coal mine in the Jharia coalfield were prosecuted for issuing gunpowder not in the form of cartridges and for preparing cartridges in a place that was not approved for the purpose. The former was fined Rs. 100 and the latter Rs. 50.

The owner of a coal mine in the Jharia coalfield was prosecuted for working the mine without a qualified manager; for failing to maintain reports required under Regulation 70, and for failing to maintain correctly the attendance registers. The case was withdrawn.

The owner and the manager of a coal mine in the Jharia coalfield were prosecuted for employing more women underground than the permitted percentage and for not maintaining a correct register of the persons employed underground. The owner was fined Rs. 100 and the manager Rs. 50.

The agent of a coal mine in the Jharia coalfield was prosecuted for allowing persons to work and raise coal from a prohibited area contrary to orders issued by the Inspector of Mines. He was fined Rs. 30.

The owner and manager of a coal mine in the Jharia coalfield were prosecuted for failing to fence off some galleries leading from a quarry; for failing to fence an incline; for not providing proper foot-paths in a quarry; for failing to slope the sides of the quarry to prevent danger from falls of material and for not maintaining plans of the underground workings of the mine as is required by the regulations. The owner was fined Rs. 200, and the manager Rs. 100.

The owner of a coal mine in the Jharia coalfield was prosecuted for not having properly stepped or sloped or otherwise secured the sides of the quarries and for also failing to keep fenced the top of the quarries. He was fined Rs. 50.

The agent and manager of a coal mine in the Jharia coalfield were prosecuted for failing to step, slope or secure the sides of quarry with the result that a fatal accident occurred by a fall of side. The agent was fined Rs. 500 and the manager Rs. 200.

The owner and manager of a coal mine in the Jharia coalfield were prosecuted for not issuing gunpowder in the form of cartridges; for not appointing a competent person in writing for preparing cartridges and for not providing a proper place for the preparation of cartridges. The owner was fined Rs. 50 and the manager Rs. 25.

The owner and temporary manager of a coal mine in the Jharia coalfield were prosecuted for employing women underground in contravention of regulations and for failing to appoint a person in authority underground while work was in progress. The former was fined Rs. 50 and the latter Rs. 25.

The manager and attendance clerk of a coal mine in the Raniganj coal field were prosecuted for failing to keep a correct record of the number of persons going underground, and for employing more women underground than the permitted percentage The manager was fined Rs 50 and the attendance clerk Rs 100

The agent, manager and register clerk of a coal mine in the Jharia coalfield were prosecuted the agent and manager for employing women under ground in contravention of the regulations and the register clerk for failing to keep a correct record of the persons working underground in the mine The agent and manager were fined Rs 250 each and the attendance clerk Rs 30

The owner and manager of a coal mine in the Jharia coalfield were prosecuted for failing to keep a correct record in the register of persons working underground in the mine The owner was acquitted and the manager fined Rs 75

For the same offence the acting manager and register keeper of a coal mine in the Jharia coalfield were prosecuted The case was withdrawn

The owner, manager and register clerk of a coal mine in the Jharia coalfield were prosecuted the owner and manager for employing women underground in the mine in contravention of the regulations for failing to maintain a correct register of the persons working underground in the mine, for failing to appoint in writing some person in authority under ground while work was in progress and the register clerk for failing to keep a correct record of the number of persons going underground and returning therefrom They were each fined Rs 50

The owner and agent of a coal mine in the Jharia coalfield were prose cuted for failing to keep a separate tracing of a surface plan for failing to keep the sides of the incline secure and for failing to fence certain inclines and inadequately fencing others and also for not fencing two air shafts and a quarry They were fined Rs 50 each

The owner, agent and manager of a coal mine in the Raniganj coalfield were prosecuted for employing an excessive number of female workers in the underground workings of the mine for failing to enter the names of female workers underground in the register and for failing to have available copies of the Act the regulations and rules and amendments thereto The owner and manager were fined Rs 50 each and the agent Rs 200

[illegible] Jharia coalfield were prose [illegible] of the inclines for failing [illegible] ich a manner as to prevent [illegible] up outside the office of the mine a notice in the prescribed form stating the time of commencement and of the end of work at the mine for failing to maintain a register of work persons underground, for failing to have available a stretcher at the min [illegible] for failing to maintain a separate tracing of the surface plan [illegible] to maintain an up to date plan of the section workings of [illegible] were fined Rs 50 each

The three joint owners and manager of a coal mine in the Jharia coalfield were prosecuted for failing to slope, step or keep secure the sides of a quarry. They were fined Rs. 50 each.

The owner, manager, overman and attendance clerk of a coal mine in the Jharia coalfield were prosecuted; the attendance clerk for not maintaining a correct register of the work-persons and the owner and manager for employing women underground in excess of the permitted percentage. They were fined Rs. 20 each.

For the same offence the agent, manager and attendance clerk of a coal mine in the Jharia coalfield were prosecuted. The agent was fined Rs. 250, the manager Rs. 50 and the attendance clerk Rs. 100.

The receiver and manager of a coal mine in the Jharia coalfield were prosecuted for using the surface tramline which passed over unstable workings in contravention of the orders imposed by the Inspector of Mines. They were fined Rs. 30 each.

The owner, agent and register clerk of a coal mine in the Jharia coalfield were prosecuted; the owner and agent for failing to submit a written notice authorising a competent person to act as manager of the mine; for employing women underground in excess of the permitted percentage; for failing to have the required inspections made by a competent person; and the register clerk for failing to keep a correct record of the persons employed underground. The owner and agent were fined Rs. 50 each and the register clerk Rs. 25.

The two joint owners, the agent and manager, of a coal mine in the Jharia coalfield were prosecuted for failing to post a relay notice outside the office of the mine; for failing to maintain a complete surface plan of the mine; for failing to slope back properly the sides of an incline and for failing to fence an incline. The owners were fined Rs. 20 each, the agent Rs. 30 and the manager Rs. 50.

The agent, manager and register clerk of a coal mine in the Jharia coalfield were prosecuted; the agent and manager for employing women underground in excess of the permitted percentage and for allowing persons to remain underground after the end of the relay; the register clerk for failing to keep a correct register of the persons working underground. The agent was fined Rs. 100, the manager Rs. 250, and the register clerk Rs. 25.

The acting manager, the man in charge of the magazine and a miner of a coal mine in the Raniganj coalfield were prosecuted; the acting manager for permitting the use of loose gunpowder underground and for failing to see that explosives left over at the end of the relay were returned to the magazine; the man in charge of the magazine for issuing loose gunpowder to miners for use underground instead of in the form of cartridges; and the miner for using loose gunpowder underground and for failing to return to the magazine the unused gunpowder at the end of the relay. The case is still pending.

The manager and attendance clerk of a coal mine in the Raniganj coalfield were prosecuted; the attendance clerk for failing to keep a correct record of the number of persons working underground; and the manager for allowing women underground without issuing passes to them; and for em-

ploying an excessive number of women underground The manager was fined Rs 25 and the attendance clerk Rs 10

The owner of a coal mine in the Raniganj coalfield was prosecuted for failing to appoint a competent manager He was fined Rs 400

The two joint owners and the agent of a coal mine in the Pench Valley coal field were prosecuted for failing to hand over to the new owner all plans books and other records required to be kept under the Act The owners were acquitted and the agent was fined Rs 400

The owner, acting manager and register clerk of a coal mine in the Raniganj coalfield were prosecuted the owner and acting manager for employing women underground in excess of the permitted percentage and for allowing persons to work underground after the time fixed for the termination of the relay, and the register clerk for not maintaining a correct register of persons going underground The owner was fined Rs 130 the acting manager Rs 50 and the register clerk Rs 20

The manager and attendance clerk [illegible] field were prosecuted, the manager for [illegible] time of the relays to the Chief Inspector [illegible] failing to maintain a correct record of the persons going underground and returning from underground daily The manager was fined Rs 100 and the attendance clerk Rs 50

The owner and manager of a china clay mine in the Bhagalpur district were prosecuted for allowing women to carry clay from the underground workings They were both acquitted

The agent manager and attendance clerk of a coal mine in the Raniganj coalfield were prosecuted, the agent and manager for employing an excessive number of women in the underground workings of the mine the attendance clerk for failing to maintain a correct record of persons at work underground The agent was fined Rs 250 the manager Rs 125 and the attendance clerk Rs 25

The owner of a coal mine in the Jharia coalfield was prosecuted for permitting persons to go underground in contravention of written orders from the Inspector of Mines, for permitting women underground in excess of the number permitted, for employing a child in the underground workings of the mine for failing to maintain a correct record of the persons working [illegible] without a qualified manager and for [illegible] underground while work was being [illegible]

The manager, attendance clerk and night shift sirdar of a coal mine in the Raniganj coalfield were prosecuted the manager for employing an excessive number of female workers underground, the attendance clerk for failing to keep a correct record of the number of persons going underground, and the night shift sirdar for sleeping while on duty The manager and attendance clerk were fined Rs 25 each and the sirdar Rs 10

The owner of a coal mine in the Jharia coalfield was prosecuted for employing persons to work in a prohibited area in contravention of [illegible] orders from the Inspector of Mines He was fined Rs 25

The owner, overman and attendance clerk of a coal mine in the Jharia coalfield were prosecuted; the owner for employing an excessive number of women underground; for failing to authorise a competent person to act as manager and for failing to arrange for the inspection of underground workings by a competent person; the overman for absenting himself from duty while work was in progress in the mine and for failing to make the inspections required; and the attendance clerk for failing to maintain a correct record of the persons at work underground. The owner was fined Rs. 25 and the other two Rs. 10 each.

The owner, manager and register clerk of a coal mine in the Jharia coalfield were prosecuted; the owner and manager for employing an excessive number of women underground; for failing to arrange for a person in authority to be constantly underground while work was being carried on and for failing to keep fenced a quarry which was not in use or course of working; and the register clerk for failing to maintain a correct record of the number of persons working underground. The owner was fined Rs. 200, the manager Rs. 50 and the register clerk Rs. 20.

The manager and blasting mistry of a mica mine in the Nellore district were prosecuted; the former for not ordering the blasting mistry back to his working place when he found that he was on the surface, and the latter for not being present when miners were drilling a relieving hole after a misfired shot had occurred. The manager was fined Rs. 50 and the blasting mistry Rs. 25.

The agent and manager of a limestone mine in the Jubbulpore district of the Central Provinces were prosecuted for failing to slope, step or secure the sides of a quarry in such a manner as to prevent danger from falls of side. The agent was fined Rs. 1,000 and the manager Rs. 750.

Two prosecutions against an agent and a late owner were instituted for failure to submit annual returns within the prescribed date. They were fined Rs. 25 each.

Information was received of the following prosecutions instituted by mine officials against subordinate staff:—

A shot-firer of a coal mine in the Pench Valley coalfield was prosecuted for firing a shot in a split gallery without giving sufficient warning or fencing off the other workings. He was fined Rs. 30.

An engine driver employed at a coal mine in the Pench Valley coalfield was prosecuted as he was found sleeping whilst on duty. He was fined Rs. 20.

An underground pump khalassie of a coal mine in the Raniganj coalfield was prosecuted for lighting a wood fire in the pump room. He was fined Rs. 40.

Amendments to the Indian Mines Act and to the Regulations, Rules and bye-laws made under the Act.

In Notification No. M-1055, dated the 27th January 1937, issued by the Government of India, Department of Industries and Labour, certain further amendments to the Supplementary Coal Mines (Temporary) Regulations, 1936, were published. The notification is reproduced in Appendix IV, Statement No. 3

In Notification No M 1051 dated the 27th January 1937, issued by the Government of India Department of Industries and Labour, further amendments were made in Appendix I to the Schedule to the Notification of the Government of India in the Department of Industries and Labour, No M 1051 dated the 1st October 1935 The notification is reproduced in Appendix IV, Statement No 4

In Notification No M 966 dated the 30th January 1937 issued by the Government of India Department of Industries and Labour, certain further Temporary Regulations were issued They are reproduced in Appendix IV, Statement No 5

In Notification No M 10[illegible]5 dated the 1st February 1937, regulations prohibiting the employment of women underground in mines were issued The notification is reproduced in Appendix IV, Statement No 6

In Notification No M 10[illegible]5 dated the 25th February 1937, issued by the Government of India Department of Industries and Labour, further amendments were made in the Schedule to the notification of the Government of India in the Department of Industries and Labour, No M 1051, dated the 1st October 1935 The notification is reproduced in Appendix IV, Statement No 7

In Notification No 453 VII M 7/37 Com , dated the 13th March 1937, the Government of Bihar in exercise of the powers conferred by clause (a) of Section 30 of the Indian Mines Act, 1923 (IV of 1923) issued rules for the constitution of Mining Boards for both coal and other than coal mines The notification is reproduced in Appendix IV Statement No 8

In Notification No M 1055 dated the 17th June 1937, issued by the Government of India Department of Industries and Labour, all coal mines in Bengal Bihar, the Central Provinces and Orissa were exempted for a period of three months from 1st July 1937, from the provisions of clause (j) of Section 29 of the said Act to the extent to which regulations made thereunder prohibited the entry of women into underground workings for purposes of employment This exemption was subject to the conditions that the total number of women employed in the underground workings of any mine on any day did not exceed 5 per cent of the total number of persons so employed The notification is reproduced in Appendix IV, Statement No 9

In Notification No M 966 dated the 10th July 1937, issued by the Government of India Department of Industries and Labour certain further temporary regulations were issued They are reproduced in Appendix IV Statement No 10

In a press Communique, dated the 10th September 1937, issued by the Government of India Department of Industries and Labour, the employment of women underground in coal mines was totally prohibited with effect from the 1st October 1937 The communique is reproduced in Appendix IV Statement No 11

In notifications Nos 227 3314 XIII of 1936 and 228 3314 XIII [illegible] dated the 25th January, 1937, and No 5-09 I M 5 1937—Com [illegible] 15th July 1937 the Governments of the Central Provinces and [illegible] Government of Orissa made certain amendments to their rules [illegible] fications are reproduced in Appendix IV, Statements Nos [illegible]

Act No. XXIX of 1937.—An Act further to amend the Indian Mines Act, 1923, came into force on the 3rd December 1937. This is reproduced in Appendix IV, Statement No. 15.

In Notification No. P. 2, dated the 15th December 1937, issued by the Government of India, Department of Mines, a list of "Permitted" explosives and a list of approved types of shot-firing apparatus were issued. The notification is reproduced in Appendix IV, Statement No. 16.

By the end of the year bye-laws under Section 32 of the Act had been established at six hundred and thirteen coal mines and twenty-two mines other than coal. Amended Bye-laws were established in four hundred and fifteen coal mines. Bye-laws for the treatment of coal-dust had also been established in forty-four coal mines.

During the year seven circular letters were issued to owners, agents and managers of coal mines. They are reproduced in Appendix IV, Statements Nos. 17 to 23.

SECTION V.—GENERAL REMARKS.

Underground fires.

In my reports for the years 1932, 1933 and 1935 reference has been made to fires at several collieries and the precautionary measures taken to prevent the spread of these fires.

At the Khas Jharia group of mines "blanketting" work was done to prevent any further extension of the fire towards Jharia town and the Jharia-Pathardih main line of the East Indian Railway. Donations by the Raja of Jharia and the Jharia Mines Board of Health and the valuable assistance given by Rao Bahadur D. D. Thacker of Jharia have enabled the protective works in the vicinity of Jharia town to be continued.

In my Annual Report for the year 1933, reference was made to an outbreak of fire at the Kusunda group of collieries which traversed an area of old workings in several seams and threatened the stability of the Kari river due to the old workings beneath and in the vicinity thereof being on fire. Several large concerns which undertook protective measures at great cost to safeguard the river and adjoining mines continued to flush "muttee" and sand through boreholes in the river bed. Practically the whole of the old workings in Nos. 11-12 seams beneath the river have been completely stowed and the stowing of galleries in No. 13 seam in proximity to the river has been commenced. It is anticipated that these protective measures will be successful.

Due to the shallow depths, the contiguity and great thickness of some of the seams liable to spontaneous combustion and the fact that no provision was made when developing some of the old mines for isolating areas liable to spontaneous heating, the difficulties in working such mines where it is necessary to adopt precautionary measures for dealing with and isolating fires have been greatly enhanced in recent years.

Exclusion of Females from underground workings in Mines

In February the Government of India issued regulations under the Indian Mines Act prohibiting the employment of women underground It was intended that the regulations should come into force with effect from the 1st July 1937, but due to representations being made by various bodies Government decided to postpone for three months the date for the total exclusion of women from the underground workings in coal mines in Bengal, Bihar, the Central Provinces and Orissa provided that the prescribed percentage for the year 1937 was not exceeded On the 22nd September 1937, Government issued a press communique stating that no total prohibition of the employ- into operation with effect from by the Labour Associations in the iew of the exclusion of women rates of two to three annas per toh according to the capacity of the tub, were given at most collieries There were no demonstrations on the 1st October when women were excluded from the mines In a few isolated cases small batches of miners refused to go down the mine because they could not take their women About a fortnight after the prohibition of female labour from underground there was a partial strike at a large colliery in the Jharia coalfield employing about 3 000 workers daily About 300 underground workers stopped work until their rates had been increased Other workers at the mine became affected After three or four days increased rates were given and normal conditions were resumed There were no other incidents in the coalfields and work was resumed in a normal way after the Durga Puja holidays Many of the women excluded from underground workings have been found employment on screening plants preparing inert dust for treating coal dust, on general surface work and in quarries

Health and Sanitation

The Asansol Mines Board of Health held four special and eleven ordinary meetings during the year Dr L Sen was Chief Sanitary Officer of the Board throughout the year except for a period of six weeks in May and June when Dr S Roy, Bacteriologist, officiated in his place The year 1937 was healthier than the preceding three years There was a decline in deaths for all ages and for infants while the upward trend in the birth rate noticed in 1936, was maintained in 1937 The death rate among the colliery population was considerably lower than that of the general population Both the upper and lower limits of monthly death rate in the mining population were lower than that of the previous year The rise in fever mortality in September and the following months coincided with the seasonal increase of malaria

Epidemic cholera was conspicuous by its absence during the year The majority of cases were of a sporadic nature There were 252 [illegible] 85 deaths during the year, as against 134 attacks and 1[illegible]

[illegible] incidence rate in collieries was 1·5 per 1,000, while that in villages was [illegible]. Due precautions were taken by way of isolating the cases, segregation [illegible] adequate disinfection and protection of water supply. [illegible] the control of the disease. The total number of persons inoculated was [illegible] and their family members.

[illegible] of small-pox. Only 92 cases of small-pox were reported during the year, as against 125 in 1931. The majority of cases [illegible] the collieries. Vaccination and re-vaccination have [illegible] the disease. Particular attention was paid to the collieries, especially to child labour, among whom a large [illegible] the protection offered by primary [illegible] children. Altogether 61,605 vaccinations were performed, of which 16,211 were primary and 45,394 were re-vaccinations.

The number of Health Visitors for maternity and child welfare work was increased from 18 to [illegible]. Each Health Visitor is in charge of an area extending over 4 square miles, including collieries and villages. 1,622 expectant mothers were visited at their home by the Health Visitors, 38 [illegible] were delivered by trained dais under their personal supervision, while 7,[illegible] were delivered by untrained dais alone. Training classes for indigenous dais were organised in eight centres and an intensive course of training was held for three months followed by a period of [illegible] between a trained and certified dai and an untrained dai. 1,485 new compounds were followed up by the Health Visitors in course of their periodical visits as against 1,200 in the previous year. The four infant welfare centres maintained by the Board were attended by 179 infants and 169 toddlers and the attending mothers were taught through a course of health talks.

A Baby Week was organised by the Asansol Health and Baby Welfare Society in eight centres, the events consisting of a Health Exhibition, Baby Show and Health Competitions. Adequate training was arranged for boys in first-aid and for girls in first-aid, home-nursing and mothercraft according to the syllabus laid down by the St. John Ambulance Association. Inter-school and inter-colliery ambulance competitions were arranged, training the candidates up to the senior first-aid standard. A junior colliery competition was confined to manual labourers below the grade of sirdars.

A special survey of the incidence of leprosy among school children was undertaken. The percentage of leprosy was found to be 2·3 among students examined in 165 schools, as against the incidence rate of [illegible] cent. in the general population. 3,402 cases received treatment in Leprosy clinics out of 9,332 known cases. A leper day was successfully organised by the Leprosy Relief Association and the total collection of flags, etc., came to Rs. 11,330. There is a staff of four Leprosy [illegible] and thirteen trained assistants maintained jointly by the Board and the Leprosy Relief Association.

The Board carried out anti-malaria operations in three extensive areas, resulting in a decline of malaria over these areas.

a campaign in Topsi area has been limited in extent due to the presence of a large number of subsidences and abandoned pits and the restricted nature of the campaign itself

During the year 1937, the Jharia Mines Board of Health held twelve ordinary, six special meetings and one joint meeting with the Jharia Water Board The estimated population of the Settlement was 555 573 persons The death rate was 16 50 per thousand as compared with 16 10 in the previous year There were 27 cases of suspected cholera with 14 deaths as compared with 64 cases with 39 deaths in the previous year The number of deaths on collieries from cholera was 9 as compared with 14 in the previous year The total number of anti cholera inoculations performed was 2 900 During the year there were 418 cases of suspected small pox with 6 deaths as compared with 3 733 cases with 329 deaths in the previous year Eight hundred and eighty nine samples of food were analysed in the Board s laboratory and prosecutions were ordered in all cases of adulteration With a view to improve the colliery housing the five years housing programme enforced by the Board last year continued during the year Subjects chosen for propaganda work were leprosy maternity and child welfare general hygiene and sanitation and ventilation in mines As in previous years all leprosy relief work continued to be managed by the Dhanbad and District Leprosy Relief Association which organised a leper day on the 17th April 1937 and was successful in raising Rs 14 750 on the occasion The District Board, the Dhanbad Municipality and the Jharia Mines Board of Health continued their annual grants during the year Dr M Wardman Chief Leprosy Officer, joined her post on the 16th May 1937 The opening ceremony of the Leprosy Hospital at Tetulmari was performed by His Excellency Sir Maurice Garnier Hallett K C S I C I E I C S the Governor of Bihar, on the 24th October 1937

During the year 815 new patients were treated in the different clinics the total number of treatments given being 28 711

The Jharia Water Board continued to function throughout the year The total quantity of water supplied to the Jharia coalfield during the year 1937 was about 475 million gallons as under —

		Gallons
1	Collieries	391 980 000
2	Non-colliery premises (domestic and non-domestic supply)	33 215 000
3	Bazars	51 100 000
	Total	475 59 000

Inspections Made by Medical Officers as ex officio inspectors of Mines

During the year many reports were received from provincial and district Medical Officers of Health concerning health and sanitation All the reports were dealt with and most of the recommendations were carried out

Statistics of Rainfall.

Statistics of rainfall in the eastern coalfields have been recorded as follows :—

	Rainfall in inches.	
	1937.	1936.
Jharia Coalfield—		
Jealgora	49·37	61·78
Topchanchi	56·18	69·80
Raniganj Coalfield—		
Asansol	56·53	59·84
Dishergarh	58·93	57·79
Giridih Coalfield—		
Giridih	60·75	77·37

Ambulance Work.

Classes in First-Aid were held at twenty-four centres in the Jharia coalfield and also in the mining areas of Singhbhum. Three hundred and eighty students attended these classes and 282 certificates were awarded. In the Raniganj coalfield similar classes were held at seven centres. One hundred and forty seven students attended these classes and 105 certificates were awarded. A St. John's Ambulance Shield was competed for among teams from various collieries in the Raniganj coalfield. The shield was won by Sitalpur No. 1 team (Messrs. Bengal Coal Company, Limited) the runners up being Samla No. 1 team (Messrs. Martin & Company). In addition to the above competition which is only open to persons holding the St. John's Ambulance Certificate, another competition was inaugurated during the year. This competition was for the Laug-Cunningham Memorial Shield. Persons not holding the St. John's Ambulance Certificate were allowed to compete, the object being to stimulate interest among the more illiterate workers.

I desire to express my appreciation of the valuable work done by lecturers and examiners during the year in the two major coalfields and in other mining districts.

Mining Boards in Bengal, Bihar and the Central Provinces.

The Bengal Mining Board held two meetings during the year. Among the subjects discussed at the meetings and by correspondence were :— (*a*) Temporary Regulations for coal mines ; (*b*) amendments to the Supplementary Coal Mines (Temporary) Regulations ; (*c*) Regulations for prohibiting the employment of women underground in mines ; (*d*) exemption of certain mines from the operation of the Indian Mines Act, 1923 ; (*e*) amendments in the Schedule to the Notification of the Government of India, in the Department of Industries and Labour, No. M-1051, dated the 1st October 1935, regarding exemption ; (*f*) postponment of the regulations for

prohibiting the employment of women underground in mines for a further period of three months, (g) amendments to the Indian Coal Mines Regulations, 1926, and the Indian Metalliferous Mines Regulations 1926, (h) further amendments to the permanent Indian Coal Mines Regulations 1926, [illegible] rendered dangerous [illegible] Coal Mines Regulations to the Indian Coal mines Regulations 1926, relating to control of first working and section working The non official members of the Board were Messrs F W Manley, A L Ojha and Rai Sahib Upendra Nath Mondal

The Bihar Mining Board for coal mines did not meet during the year. The subjects dealt with by correspondence were —(a) Amendments to the Indian Coal Mines Regulations 1926 and the Indian Metalliferous Mines Regulations, 1926, (b) further amendments to the permanent Indian Coal Mines Regulations, 1926, (c) proposed amendment of the Coal Mines Regulations to introduce certification of shot firers, and (d) amendments to the Indian Coal Mines Regulations, 1926, relating to control of first working and section working The non official members of the Board were Messrs D M Archibald, A L Ojha, Khetra Nath Sen Gupta and J Mackie

The non official members of the Mining Board for mines other than coal mines were Messrs G A Young F G Percival, V K B Pillai and J W Kendall

The Central Provinces Mining Board held no meetings during the year The subjects dealt with by correspondence were —(a) amendments to the permanent Indian Coal Mines Regulations, 1926, (b) proposed amendments of the Coal Mines Regulations to introduce certification of shot firers and (c) amendments to the Indian Coal Mines Regulations, 1926, relating to control of first working and section working The non official members of the Board where Messrs D M Nargolwalla L H Bartlett, O B E, G Llewelyn, Shamsher Bahadur Verma and Kunjlal Tulsiram Mehta

Board of Examiners

Five meetings of the Board of Examiners were held during the year. The non official members of the Board were Messrs J Mackie, N N Sarkar and L A Jacobs for the first four meetings Mr Jas E Phelps was appointed a member of the Board for the last meeting, *vice* Mr J Mackie who had resigned The local examiners appointed were Messrs W B Penman and S C Ghosh for coal mine managers' first class certificates, Messrs James Thomson and R Hearn for coal mine managers second class certificates and Mr J Mackay for the examination for coal mine surveyors' certificates Mr A Young, Inspector of Mines (Offg) was also an examiner and acted as Secretary for the coal mine managers' first and second class examinations, Mr N Barraclough was also an examiner and acted as Secretary for the coal mine surveyors' examination

Ten first class certificates of competency to manage a coal mine were granted in lieu of British certificates of the same class At the examinations for coal mine managers' certificates held at Dhanbad in February and March,

81 candidates sat for first class certificates and 56 for second class certificates. Seven certificates of the first class and twenty-two of the second class were granted. One duplicate surveyor's certificate of service was granted. At the examination for coal mine surveyors' certificates of competency held at Dhanbad in November, 35 candidates attended the examination—nine of them were successful.

Five hundred and eighty one persons were examined for coal mine sirdars' certificates of competency and 458 certificates were granted. Out of 829 holders of sirdars' certificates examined in gas-testing, 510 were successful and their certificates were duly endorsed to that effect. 866 holders of sirdars' certificates appeared for reexamination in eyesight and hearing. 832 were successful and their certificates were duly endorsed. Under Coal Mines Regulation 49 the certificates of ten sirdars were suspended for periods varying from three to six months. During the year 29 duplicate sirdars' certificates and 89 duplicate dues were issued.

Mining Education.

At the Indian School of Mines, the number of students on the roll at the beginning of the session was 68, as compared with 59 at the beginning of the previous session. The results of the Diploma and Certificate examinations held in July 1937, were as follows:—

Diploma or Certificate.	No. of candidates.	No. of successful candidates.
Diploma of Associateship in Geology	3	2 (Class I).
		1 (Class II).
Diploma of Associateship in Mining Engineering . .	9	3 (Class I).
		6 (Class II).
Certificate in Geology	1	1
Certificate in Metal Mining	5	4
Certificate in Coal Mining	11	11

The mine surveying camp was pitched at Bhulanbararee colliery during the month of November 1937, and 48 students were in attendance. Visits and tours of inspection were paid to the mica mines of Kodarma, the copper and iron mines of Singhbhum and to many local collieries and places of geological interest. At the examinations held for coal mine managers' certificate held at Dhanbad in February, two former students obtained the first class colliery managers' certificate and five obtained the second class colliery managers' certificates. Two students obtained the surveyors' certificate of competency. In November 1937, the total number of students on the roll was 77.

In the Department of Mining and Metallurgy at the Benares Hindu University there were 95 students at the beginning of the session, as compared

with 80 at the beginning of the previous session One student passed the final examination for the degree of B.Sc in Mining and sixteen in Metallurgy Up to date the total number of mining graduates is 29 and the total number of metallurgy graduates 59 Immediately after qualifying practically all the graduates found suitable employment A mine surveying camp was arranged at Barakar in December and an underground survey conducted at Begunia colliery in the Raniganj coalfield Tours of inspection were paid to mines at Kodarma the copper mines at Mosaboni and to a number of [illegible] collieries in the Raniganj and Jharia coalfields At the examinations [illegible] mine managers certificate held at Dhanbad in February, three [illegible] dents were successful at the second class colliery managers examination

No advanced classes were held in the Raniganj coalfield during [illegible] Such classes however, continued to be held under the auspices [illegible] ment of Bihar at Jharia and Sijua in the Jharia coalfield The [illegible] of students attending the classes at these two centres was [illegible] 56 in the previous year Eighteen of the third year [illegible] the final examinations and eight were successful [illegible] courses of lectures were delivered in the vernacular to [illegible] in the Raniganj coalfield in Bengal and in the Jharia [illegible] There were eight centres in the Raniganj coalfield [illegible] this course In the Jharia coalfield there were six [illegible] of 285 Classes in gas testing were also held at [illegible] in the Raniganj coalfield and at Jharia in the Jharia [illegible] of colliery sirdars and shot firers in gas testing [illegible] enrolled for these classes in the Raniganj coal[illegible] coalfield 48 Special classes in mine surveying [illegible] tion for mine surveyors certificates of competency [illegible] the middle of August to November

SCIENTIFIC AND TECH[illegible]

(a) *Mining, Geological and Met[illegible]*

During the year the name of the [illegible]

The total membership [illegible] year of the Institute [illegible] to the annual meeting six [illegible] general meeting were held [illegible] Limited's Engineering [illegible] Limited's Dishergarh [illegible] inspected the operations [illegible] Limited's works at [illegible] Wagon Company [illegible] Metallurgical Laboratory [illegible] and the Pressed [illegible] and Steel Co[illegible] by Mr J P [illegible]

Three issues of the Transactions were published. The Government of India prize was awarded to Mr. W. Gilbert for his paper entitled "Some Aspects of the Ceramic Industry"; the Institute gold medal to Mr. E. R. Gee for his paper. "The Economic Geology of the Northern Punjab, with notes on adjoining portions of the North-West Frontier Province"; the Institute silver medal to Mr. W. Gilbert for his above-mentioned paper; and two Institute bronze medals to Dr. J. Sanjana and Mr. R. A. MacGregor for their respective papers on "Phenomena within the plastic range of Coals" and "Deterioration of Steel under Service Stresses". The Pickering medal, presented by the Institute for the best student in mining at the Indian School of Mines, was awarded to Mr. I. S. Jain.

(b) *The Geological, Mining and Metallurgical Society of India.*

The total membership including subscribers at the close of session 1936-37 was 178. In addition to the annual general meeting, ten ordinary general meetings were held. Nine meetings were held in the Geological laboratory, Presidency College, Calcutta, and one meeting in the Indian School of Mines, Dhanbad. Fifteen original papers dealing with various aspects of geology were read and discussed. During the year parts 3 and 4 of Volume VIII and parts 1 and 2 of Volume IX of the Quarterly Journal of the Society and one bulletin on "Coal Conservation" were published. During the year seven excursions to the following places were arranged:—National Iron and Steel Company, Limited, (Howrah); Bata Shoe Factory, Batanagar; Bharat Glass Works, Belgharia; Pottery Works, Belgharia; Peat Beds, Belgharia; Hukumchand Electric Steel Works, Ballygunj, Calcutta; and Loyabad Colliery Rescue Station, Jharia coalfield.

(c) *The National Association of Colliery Managers (Indian Branch).*

The number of members of the National Association of Colliery Managers, Indian Branch, at the end of the year was 90. Some of the subjects dealt with by the Council during the year were:—(1) the questionnaire of the Coal Mining Committee. Mr. R. J. Pothecary and Mr. J. Brook, as representatives of this Association, were orally examined by the Coal Mining Committee; (2) examination of the Bihar Government Notification relating to the registration of work-persons; (3) proposed bye-laws promulgated under the Bengal Mining Settlement Act by the Asansol Mines Board of Health for the prevention and control of epidemic diseases; (4) representations to the Chief Inspector of Mines in India on the question of the stoppage of mine ventilating fans; (5) recommendation to the Government of India that all women should be excluded from the underground workings in mines; (6) deputation to the East Indian and Bengal Nagpur Railways with the object of bringing about closer co-operation between colliery and railway staffs in the working of colliery sidings. Mr. M. M. Mukherjee was joint representative of the National Association of Colliery Managers, Indian Branch, and the Indian Mine Managers' Association on the Asansol Mines Board of Health; Mr. R. J. Pothecary represented the Association on the Health and Baby Welfare Central Committee, Asansol. Mr. J. Curley represented the Association on the Asansol Leprosy Relief Committee; Mr. J. T. Caldwell represented the Association on the Dhanbad Cemetery Committee and Mr. V. C. Durham on the Mining Education Advisory Board.

(c) *The Indian Miners Association.*

This Association is registered under the Indian Trade Union Act and has its head office at Jharia. This association is affiliated with the National Trades Union Federation, Bombay. The membership is given as over 4,000. The rates of subscription vary from one to four annas per month, according to the scale of pay. The association has conducted meetings and lantern lectures on sanitation, hygiene and temperance, etc. Assistance has also been rendered by the association in compensation claims and wage disputes.

Coal Mining Committee.

In my last report reference was made to the appointment of the Coal Mining Committee by the Government of India in their Resolution No. M-955, dated the 29th October 1936, and the terms of reference were given.

The report of the Committee was published in May 1937. It is of great value both as a comprehensive presentation of the conditions now obtaining in the coal mining industry in India and as furnishing a basis for the further consideration of the problems which these conditions create. The recommendations of the Committee were summarised in the final chapter of the report. The Government of India have already taken action on a number of these recommendations, while the more important proposals of the Committee relating to stowing in coal mines are engaging their attention.

Visitors to the Coalfields.

His Excellency Sir Maurice Hallett, K.C.S.I., C.I.E., I.C.S., visited the Jharia coalfield in October. Inspections of underground workings were made at East Ena and Kustore collieries. At East Ena His Excellency was received by Rao Bahadur D. D. Thacker, Managing Director. At Kustore an inspection of a portion of the underground workings and a visit to the hospital and workshops were arranged. A surface inspection was also made of the fire areas at the Kari Jore. During the course of His Excellency's stay in Jharia coalfield visits were also paid to the Charitable Hospital and the Indian School of Mines at Dhanbad. His Excellency formally opened Dr. G. C. Ghosh's Memorial Leprosy Hospital at Tetulmuri.

The Hon'ble Sir Muhammad Zafrullah Khan, Kt., Bar-at-Law, Railway and Commerce Member of the Government of India, paid a visit to the Kargali and Bokaro Joint Collieries.

Mr. Jagat Narain Lal, Parliamentary Secretary to the Revenue Minister, Bihar, visited the Jharia coalfield in November to make preliminary enquiries into labour conditions in mines. On 25th November he inspected the underground workings in a coal mine and on the 26th November he attended a meeting of representatives of owners and labour.

Official Duties, 1937.

Dr. D. Penman was Chief Inspector of Mines. He was on leave from 13th May to 12th November.

Mr. W. Kirby, Inspector, No. 1 Circle, was on leave up to 26th March and officiated as Chief Inspector of Mines from 13th May to 12th November.

Mr G S Cameron Inspector of Mines held charge of No 2 Circle throughout the year

Mr N Barraclough Inspector of Mines was on deputation to the Coal Mining Committee up to the 10th April and held charge of No 1 Circle from 13th May to 12th November

Mr H M Mitra Electric Inspector of Mines was on leave from 14th June to 31st July

Mr N G Chatterjee Junior Inspector of Mines, officiated as Inspector up to 26th March vice Mr Kirby granted leave

Mr H K Chatterjee Junior Inspector of Mines was on duty throughout the year

Mr A Young Junior Inspector of Mines officiated as Inspector up to 5th April vice Mr N Barraclough deputed to the Coal Mining Committee and was on leave from the 6th April to 21st October

Mr S S Grewal Assistant Inspector of Mines, was promoted to be a Junior Inspector from 2nd March

Mr V S Chopra Assistant Inspector of Mines was on leave from the 23rd January to 6th February

Mr G S Jabbi was appointed to be an Assistant Inspector from the 5th March vice Mr Grewal promoted to be Junior Inspector and was on duty till the end of the year

The number of coal mines worked during the year was 604 which is 100 more than in the previous year The number of metalliferous (including stone etc) mines at work was 1 321 as compared with 1 469 in 1936

During the year 1 230 mines were inspected many of them being inspected several times 3 246 separate inspections were made The cause and circumstances of nearly all fatal accidents and serious accidents of importance and all complaints of breaches of regulations and rules were investigated Many inspections were made at the invitation of mine owners Superintendents and Managers desirous of obtaining advice on safety matters In the major coalfields a large proportion of the time of the Inspectors is occupied in investigating cases of actual or threatened damage to dwellings and roads by reason of the underground working of coal mines in dealing with underground fires and in examining protective works against the risk of inundation In addition a large number of inspections of the sanitary conditions at mines were made by medical officers as *Ex officio* Inspectors of Mines

Orders were issued and withdrawn as follows —

Section Regulation or Rules	Orders issued	Orders withdrawn
Under Section 19 (1)	2	4
Under Section 19 (2)	44	14
Under Section 19 (1A)	50	2

Exemptions, partial or complete, and permissions were granted and withdrawn as follows :—

Regulation.	Number of cases.	Number withdrawn.
Under Coal Mines Regulation 53	4	—
Under Coal Mines Regulation 76	2	—
Under Coal Mines Regulation 88	1	—
Under Coal Mines Regulation 116	1	1
Under Coal Mines Regulation 123	1	2
Under Coal Mines Regulation 136	1	—
Under Temporary Coal Mines Regulation 13 (1) . .	3	—
Under Supplementary Temporary Coal Mines Regulation 3.	3	—
Under Metalliferous Mines Regulation 74	1	—

Information was received of twelve outbreaks of fire underground, eight of which were new occurrences and four from old fire areas.

The number of original cases under the Land Acquisition (Mines) Act, 1885, at the end of 1937 stood at 735, thirteen of which were cases dealt with during the year. There were seventeen applications of modifications of restrictions and two complaints of violations of restrictions, all of which were dealt with. The Act applies to Bengal and Bihar and Orissa only. In other provinces where Government owns the minerals Local Governments were advised as to the restrictions necessary in cases where mine owners sought permission to work minerals beneath railways, villages, etc.

I have the honour to be,

Sir,

Your most obedient servant,

W. KIRBY,

Chief Inspector of Mines in India.

APPENDIX I.

Statistics of Mines and Minerals.

Table No. 1.

APPEN

STATISTICS OF MINES

Table

Number of workers and output of minerals during the

Province.	District and Mineral field.	Total Output.	Average number of Underground. Males. Overmen and Sirdars.	Coal-cutters.	Loaders.	Other skilled labour.	Other unskilled labour.	Total Males.	Females.	Total Males and Females.
		Tons								
Assam	Khasi and Jaintia Hills	3,735	4	10	5	1	1	21	...	21
	Lakhimpur, Makum Coalfield	218,488	73	218	311	294	315	1,211	...	1,211
	Naga Hills, Nazira ,,	22,427	10	40	28	49	59	186	...	186
	Total	243,650	87	268	344	344	375	1,418	...	1,418
Baluchistan	Quetta-Pishin, Sor Range Coalfield.	4,362	7	46	54	1	...	108	...	108
	Sibi, Khost Coalfield	6,262	10	52	72	5	3	142	...	142
	Total	10,624	17	98	126	6	3	250	...	250
Bengal	Bankura Raniganj Coalfield	1,713	2	7	4	...	3	16	...	16
	Birbhum ,, ,,	2,054	1	11	14	1	2	29	...	29
	Burdwan ,, ,,	6,524,053	894	14,016	6,669	3,946	7,532	33,047	1,352	34,399
	Total	6,527,820	897	14,034	6,687	3,947	7,537	33,093	1,352	34,444
Bihar	Manbhum— Raniganj Coalfield (part of)	574,397	111	1,611	591	396	793	3,502	117	3,619
	Jharia ,,	9,479,775	1,272	15,831	10,870	5,021	8,064	41,058	1,752	42,810
	Hazaribagh— Jharia Coalfield (part of)	121,455	16	208	115	36	38	413	10	423
	Bokaro ,,	2,309,170	60	916	625	236	608	2,445	85	2,530
	Giridih ,,	674,794	146	3,043	656	198	632	4,675	148	4,723
	Karanpura ,,	519,162	24	449	223	153	217	1,066	45	1,111
	Ranchi— Karanpura Coalfield (part of)	15,166	3	34	28	11	12	88	3	91

DIX I.

AND MINERALS

No 1.

year 1937 at mines under the Indian Mines Act.

persons employed daily in and about the mines

Open workings								Total Underground and Open workings.	Surface						Grand Total.
Males									Males						
Overmen and Sirdars	Coal-cutters	Loaders	Other skilled labour	Other unskilled labour	Total Males	Females	Total Males and Females		Clerical and supervising staff	Skilled labour	Unskilled labour	Total Males	Females	Total Males and Females.	
A.L															
	..		..					*1	2	1	5	8	10	19	40
1	3	5	6		15	8	23	1 284	46	167	181	394	147	541	1 775
	..		..					160	12	26	43	80	..	80	276
1	3	5	6		15	8	23	1 441	81	204	228	493	157	650	2,091
	..							108							108
..	..			..				142	1	3	8	11	..	11	152
					..	..		250	1	3	8	11		11	261
2	7		..	3	12	4	16	22	2	9	1	12		12	44
			..					39	2	2	2	6	2	9	68
15	118	17	22	134	306	122	428	34 927	1 524	2 741	6 603	11 638	4 543	16,168	50 995
17	128	1	22	137	318	126	444	34 886	1 578	3 253	6 855	11 640	4 543	16,189	51 077
11	146	30	43	112	341	189	530	4 149	200	419	560	1 179	613	1,792	5 941
127	1 665	604	273	1 317	3 986	1 608	5 593	43 503	*000	4 530	11 281	17 617	6 883	24,700	73 *03
7	42		20	24	93	5	198	561	59	67	188	313	128	441	1 002
48	2 599	854	264	895	4 600	2 1 0	6 710	9 240	263	532	1 379	*105	365	2 470	11 710
5	4		2	6	13	3	16	4 739	99	146	706	950	476	1 426	6 165
1	346	75	238	448	1 111	307	1 418	2 529	65	202	275	542	149	791	3 320
1	5	3	1	1	11	2	13	108	9	10	34	48	22	70	174

APPEN

STATISTICS OF MINES

Table

Number of workers and output of minerals during the

Province.	District and Mineral field.	Total Output.	Average number of persons employed						
			Underground.						
			Males.					Females.	Total Males and Females.
			Foreman and Mates.	Miners.	Other skilled labour.	Other unskilled labour.	Total Males.		
		Tons						CHROMITE	
Baluchistan	Quetta Pishin	45	...	...	...	...	...	...	...
	Zhob	27,164	4	106	...	...	110	...	110
	Total	27,209	4	106	...	...	110	...	110
Bihar	Singhbhum	7,678	...	...	...	...	...	...	...
Bombay	Ratangiri	500	...	...	...	...	...	...	...
	Grand Total (Chromite Ore) for 1937.	35,387	4	106	...	...	110	...	110
	Grand Total of preceding year.	28,142	3	45	...	...	48	...	48
	Difference	+7,245	+1	+61	...	...	+62	...	+62
		Tons						COPPER	
Bihar	Singhbhum	371,458	9	443	...	1,165	1,617	...	1,617
	Total of preceding year.	357,194	3	417	...	1,102	1,522	...	1,522
	Difference	+14,264	+6	+26	...	+63	+95	...	+95

DIX I—*contd.*

AND MINERALS—*contd*

No. 1—*contd.*

year 1937 at mines under the Indian Mines Act—*contd*

daily in and about the mines

Open workings							Total Underground and Open workings	Surface						Grand Total
Males					Females	Total Males and Females		Males				Females	Total Males and Females	
Foremen and Mates	Miners	Other skilled labour	Other unskilled labour	Total Males				Clerical and supervising staff	Skilled labour	Unskilled labour	Total Males			
ORE														
1	12			13		13	13							13
10	202	2	15	229		229	339	4	4	156	164		164	503
11	214	2	15	242		242	352	4	4	156	164		164	516
41	398	23	12	474	424	898	898	13	8	5	26	11	37	935
1		13		14	4	17	17	1			1		1	18
53	612	37	27	729	428	1 157	1 267	18	12	161	191	11	202	1 469
54	556	78	21	709	394	1 103	1 151	11	5	119	125	2	160	1 311
−1	+56	−41	+6	+20	+34	+54	+116	+7	+7	+42	+56	−14	+42	+158
ORE.														
							1 617	52	303	838	1 193	402	1 595	3 212
							1 522	39	248	679	966	390	1 356	2 878
							+95	+13	+55	+159	+227	+12	+239	+334

APPE

STATISTICS OF MINES

Tabl

Number of workers and output of minerals during the

Province.	District and Mineral field.	Total Output	Average number of persons employed						
			Underground.						
			Males.					Females.	Total Males and Females.
			Foremen and Mates.	Miners.	Other skilled labour	Other unskilled labour.	Total Males.		
		Cwt							MI
Bihar	Bhagalpur	923	3	63	1	10	77	...	77
	Gaya	20,055	84	1,285	304	1,203	2,876	...	2,876
	Hazaribagh	61,108	768	6,818	1,252	2,735	11,573	...	11,573
	Manbhum	246	4	18	6	22	50	...	50
	Monghyr	3,646	31	224	53	194	502	...	502
	Total	85,978	890	8,408	1,616	4,164	15,078	...	15,078
Madras	Nellore*	15,647	55	570	562	406	1,593	...	1,593
	Nilgiris	121	2	18	2	10	32	...	32
	Total	15,786	57	588	564	416	1,625	...	1,625
Rajputana	Ajmer-Merwara*	1,895	14	183	12	72	281	...	281
	Grand Total (Mica) for 1937.	103,641	961	9,179	2,192	4,652	16,984	...	16,984
	Grand Total of preceding year.	86,504	779	9,053	1,575	4,443	15,850	...	15,850
	Difference	+17,137	+182	+126	+617	+209	+1,134	...	+1,134

* 28,863 cwt. of waste mica useful for

DIX I—*contd.*

AND MINERALS—*contd.*

No. 1—*contd.*

year 1937 at mines under the Indian Mines Act—*contd*

daily in and about the mines

Open workings							Total Underground and Open workings	Surface						Grand Total
Males					Females	Total Males and Females		Males				Females	Total Males and Females	
Foremen and Mates	Miners	Other skilled labour	Other unskilled labour	Total Males				Clerical and supervising staff	Skilled labour	Unskilled labour	Total Males			
CA														
6	37		53	96	41	137	214	7			7	2	9	223
14	411	74	204	703	29	732	3 008	195	310	73	578	85	663	4,271
194	2,139	182	570	3 085	149	3 234	14 807	575	757	626	1,908	466	2,374	17,181
20	26	18	49	111	51	162	212	12	4	28	44	10	54	266
53	241	73	219	566	69	635	1,137	58	183	27	268	127	395	1 532
267	2 854	345	1,095	4 561	339	4 900	19,978	847	1,254	764	2,865	630	3,495	23,473
29	202	278	334	843	757	1,600	3,193	132	279	304	715	987	1,702	[illegible]
			...				32	.	9	6	15	1	16	[illegible]
29	203	278	334	843	757	1,600	[illegible]	133	[illegible]	[illegible]	[illegible]	[illegible]	1,71[illegible]	[illegible]
30	345	19	7	401	42	443	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	[illegible]	[illegible]
3-6	3,401	642	1 436	5 805	1,133	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
214	2,222	560	835	3,831	894	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
+112	+1,179	+82	+601	+1,974	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

plitting was also raised

APPEN

STATISTICS OF MINES

Table

Number of workers and output of minerals during the

Province.	District and Mineral field.	Total Output.	Average number of persons employed — Underground. Males. Foremen and Mates.	Miners.	Other skilled labour.	Other unskilled labour.	Total Males.	Females.	Total Males and Females.
		Tons.							SA
Panjab . .	Jhelum . .	123,197	29	415	15	149	638	6	644
	Mianwali . .	14,392	...	98	...	...	98	...	98
	Shahpur . .	26,224	5	81	12	37	135	9	144
	Grand Total (Salt) for 1937.	163,813	34	594	57	186	871	15	886
	Grand Total of preceding year.	151,523	34	600	56	206	896	32	928
	Difference . .	+12,290	...	—6	+1	—20	—25	—17	—42
		Tons.							MAGNE
Madras . .	Salem . . .	32,782	...	...	...	...	...	...	...
	Total of preceding year.	12,966	...	...	...	...	...	...	...
	Difference . .	+10,816	...	...	...	...	...	...	...

DIX I—*contd*

AND MINERALS—*contd*

No. 1—*contd.*

year 1937 at mines under the Indian Mines Act—*contd*

daily in and about the mines

Open workings							Total Underground and Open workings	Surface						Grand Total
Males					Females	Total Males and Females		Males				Females	Total Males and Females	
Foremen and Mates	Miners	Other skilled labour	Other unskilled labour	Total Males				Clerical and supervising staff	Skilled labour	Unskilled labour	Total Males			
LT														
1		11		12	..	12	656	1	83	236	320		320	976
							98	..		68			68	166
					..	1	144	1	9	57	67		67	211
1		11		12	..	13	898	2	92	361	387		455	1 353
1	10		225	236		236	1 164	1	77	147	157	1	226	1 390
..	—10	+11	—225	—224		—223	—266	+1	+22	+214	+230	—1	+229	—37
SITE														
17	332		721	1 070	310	1 380	1 380	19	83	74	176	8	184	1,564
16	236		490	742	147	889	889	18	108	10	136	9	145	1 034
+1	+96	...	+231	+328	+163	+491	+491	+1	—25	+64	+40	—1	+39	+530

DIX I—*contd.*

AND MINERALS—*contd*

No. 1—*contd.*

year 1937 at mines under the Indian Mines Act—*contd*

daily in and about the mines

Open workings							Total Underground and Open workings	Surface						Grand Total.
Males					Females	Total Males and Females		Males				Females	Total Males and Females	
Foremen and Mates	Miners	Other Skilled labour	Gd or unskilled labour	Total Males				Clerical and supervising staff	Skilled labour	Unskilled labour	Total Males			
TITE														
1	7	9	18	35	18	53	53	1			1		1	54
2	4			6	6	12	12	2		24	26	36	62	74
3	11	9	18	41	24	65	65	3		24	27	36	63	128
1	15		31	47	56	103	137	1		17	18	30	48	185
							6					2	2	8
							8							8
							14					2	2	16
		34	2	32		32	49		36	5	41		41	90
4	26	39	51	120	80	200	265	4	30	46	86	68	154	419
5	35	55	76	174	78	252	316	3	51	21	75	8	83	401
−1	−12	−16	−25	−54	+2	−52	−53	+1	−15	+25	+11	+60	+71	+18
TE 4	63	18	28	113	5	118	118					...		118

APPEN

STATISTICS OF MINES

Table

Number of workers and output of minerals during the

Province	District and Mineral field	[illegible]	Average [illegible] employed						
			[illegible]						
			Men						
			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		Tons							SLA
Punjab	Gurgaon	[illegible]		...	...	...			...
	Rohtak	[illegible]		...	...	...	...	...	...
	Total	[illegible]			...			...	
	Grand Total (Slate) for 1907.	[illegible]				...	...	...	...
	Grand Total of previous year.	[illegible]	...	...	...		...	...	...
	Difference	[illegible]		...		...	...	...	...
		Tons							LIME
Bihar	Shahabad	745,067	...	...	...	...	...	...	...
Central Provinces.	Bilaspur	91,210	...	...	...	...	...	...	...
	Jubbulpore	495,755	...	...	...	...	...	...	...
	Total	586,965	...	...	...	...	...	...	...
Madras	Coimbatore	126,131	...	...	...	...	...	...	...

DIX I—*contd.*

AND MINERALS—*contd*

No. 1—*contd.*

year 1937 at mines under the Indian Mines Act—*contd*

daily in and about the mines

Open workings							Total Underground and Open workings	Surface						Grand Total.
Males					Females	Total Males and Females		Males				Females	Total Males and Females	
Foremen and Mates	Miners	Other skilled labour	Other unskilled labour	Total Males				Clerical and supervising staff	Skilled labour	Unskilled labour	Total Males			
TE—*contd*														
11	81	33	25	100		100	100	1			3		3	103
53	111	76	122	362		363	36[illegible]	7	2	2	11	—	11	373
64	14[illegible]	109	147	462		462	462	8	2	4	14	—	14	4[illegible]
65	205	1[illegible]7	175	575	5	580	580	8	2	4	14		14	594
70	17[illegible]	136	163	541	7	548	548	1		2	3	—	3	5[illegible]1
−2	+33	−9	+12	+34	−2	+32	+32	[illegible]	[illegible]	[illegible]	+1		+11	[illegible]
STONE														
108	559	128	597	1 39	3 5	1[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		62
1[illegible]	14[illegible]	2 2	31	460	1[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		99[illegible]
100	337	12[illegible]	1 [illegible]6	1 [illegible]3	2[illegible]	3[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	91 60 60 25 5
1 5	4 9	397	1 20[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
2			1[illegible]	1[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	41	250

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APPEN

STATISTICS OF MINES

Table

Number of workers and output of minerals during the

Province.	District and Mineral field.	Total Output.	Average number of persons employed						
			Underground.						
			Males.					Females.	Total Males and Females.
			Foremen and Mates.	Miners.	Other skilled labour.	Other unskilled labour.	Total Males.		
		Tons							LIME
Punjab	Attock	221,132		...	...	...	...	...	...
	Jhelum	8,67		.	...		...	...	...
	Mianwali	28,320		..	...	...	...	...	...
	Total	260,129		...	...	...	..	...	...
	Grand Total (Limestone) for 1937	1,318,698	..	...	..	...	...	...	...
	Grand Total of preceding year	1,007,957		.	...	.	..	...	...
	Difference	+ 310,641	..	..	...	..	...	...	...
					STONE (CHIEFLY IGNEOUS				
Bengal	Birbhum	Tons. 88,112	..	...	.	...	...	..	...
Bihar	Gaya	33,495	.	...	..	...	...	...	...
	Monghyr	37,055	...	...		...	...	...	...
	Sonthal Parganas	337,108	...	...		...	...	...	...
	Shahabad	48,579		...	...	...	...	...	...
	Singhbhum	32,555		...	...	...	..	...	...
	Total	488,792	...	...	...	...	...	...	...
Bombay	Bombay	163,218	...	...	...	...	...	...	...
	Bombay Suburban	18,930	...	...	...	...	...	...	...
	Kaira	2[illegible],850	...	...	...	...	...		...
	Surat	85,268	...	...	...	...	...	...	...
	Thana	22,3[illegible]6	...	...	...	...	...	...	...
	Total	310,602	...	...	...	...	...	...	...

DIX I—*contd.*

AND MINERALS—*contd.*

No. 1—*contd.*

year 1937 at mines under the Indian Mines Act—*contd*

daily in and about the mines

Open workings							Total Underground and Open workings	Surface						Grand Total
Males					Females	Total Males and Females		Males				Females	Total Males and Females	
Foremen and Mates	Miners	Other skilled labour	Other unskilled labour	Total Males				Clerical and supervising staff	Skilled labour	Unskilled labour	Total Males			
STONE—*contd*														
5	39	3	337	384		384	384							384
1	30	8	2	41		41	41	3	4				7	48
5			200	205	7	212	212							212
11	69	11	539	630	7	637	637	3	4		7		7	644
236	1,107	536	2 505	4 284	2 640	7,024	7,024	234	259	693	1,186	239	1,425	8,449
227	1,067	493	2,129	3,916	2,794	6 710	6 710	174	258	242	674	199	873	7 583
+ 9	+40	+43	+376	+368	−154	+314	+314	+60	+1	+451	+512	+40	+552	+866
ROCK)														
1	238	5	81	325		325	325	32	54	263	349	132	481	806
13	233	154	10	407	165	572	572		3		3		3	575
4		145		149	82	231	231	1	3	7	11		11	242
79	774	431	290	1,574	246	1 820	1 820	97	187	405	689	239	928	2,748
			224	224	53	277	277							277
12	189	24	278	503	352	856	855	2	35	10	47	5	52	907
108	1 193	754	802	2,857	898	3,755	3 755	100	226	422	750	244	994	4,749
2	137	55	128	322	..	322	322	26	3	21	50	41	91	413
		...	34	34	.	34	34	2	16	42	60		60	94
2	10			1		12	12	5	4	60	69		69	81
11	22	63	204	300	216	516	516	7		18	25	...	25	541
5			113	118	69	187	187	5			5		5	192
20	169	118	479	786	285	1,071	1 071	45	23	141	209	41	250	1 321

STATISTICS OF MINES,

Table

Number of workers and output of minerals during the

Province.	District and Mineral field.	Total Output	Average number of persons employed							
			Underground.							
					Males.					
			Foremen and Mates.	Miners.	Other skilled labour	Other unskilled labour.	Total Males.	Females.	Total Males and Females.
					STONE (CHIEFLY IGNEOUS					
		Tons								
Central Provinces.	Akola	7,732	.	...	.	.	...	...	...
	Nagpur	8,021			...		.	...	...
	Total	15,753	..		.		...	...	...
Madras	Chinglepat	59,586	.	.	...	...	...	...	..
	East Godavari	9,305	...	...	...	..	...	...	.
	Guntur	53,370	..	...	..	.	...	...	
	Kistna	7,199		..		..	...	...	
	Total	129,460					...	...	...
Punjab	Jhelum	61,074	...	...	...	...	...	...	...
	Sheikhupura	8,449	..	...	...	...			...
	Total	69,523		...	...	.		...	...
Sindh	Sukkur	30,127	...				...	...	

DIX I—*contd.*

AND MINERALS—*contd*

No. 1—*contd*

year 1937 at mines under the Indian Mines Act—*contd*

daily in and about the mines

Open workings							Total Underground and Open workings	Surface						Grand Total
Males					Females	Total Males and Females		Males				Females	Total Males and Females	
Foremen and Mates	Miners	Other skilled labour	Other unskilled labour	Total Males				Clerical and supervising staff	Skilled labour	Unskilled labour	Total Males			
ROCK)—*contd*														
		3	50	53	35	68	88	1			1		1	89
2			100	102	100	202	202	1	..		1		1	203
2		3	150	155	135	290	290	2			2		2	292
..		449	22	471	338	809	809	19		82	101	55	156	965
		62		62	16	78	78							78
27	100	123	47	197	17	214	214		2	13	15	5	20	234
				100		100	100	5	..	50	55	10	65	165
27	100	634	69	830	371	1 201	1,201	24	2	145	171	70	241	1 442
5	68		106	179	7	186	186	3	5	16	24		24	210
6	23	7	26	62		62	62	3	6	26	34		34	96
11	91	7	132	241	7	248	248	5	11	42	58		58	6
9	61	38		111	22	133	133	1		1	2	..	2	135

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STATISTICS OF MINES

Table

Number of workers and output of minerals during the

Province.	District and Mineral field.	Total Output.	Average number of persons employed						
			Underground.						
			Males.					Females.	Total Males and Females.
			Foreman and Mates.	Miners.	Other skilled labour.	Other unskilled labour.	Total Males.		
		Tons.							
									STONE (CHIEFLY
United Provinces.	Allahabad	52,319	..	...	..		...	...	...
	Banda	2,159		.		...	...	...	...
	Jhansi	18,618	..	.	..	...	...	...	...
	Total	73,087	...	.		...	...	...	...
	Grand Total (Stone) for 1937.	1,205,756	..	.		...	...	...	.
	Grand Total of preceding year.	1,189,562	..	.	...	...	...	..	...
	Difference	+16,194	...	..	...	...	...	...	...
		Tons.							SAND
Bihar	Shahabad	39,414	...	...	...	...	...	...	...
	Total of preceding year.	33,734	.	...	...	...	...	...	...
	Difference	+5,680	...	...	...	...	...	...	...

DIX I—*contd.*

AND MINERALS—*contd.*

No. 1—*contd.*

year 1937 at mines under the Indian Mines Act—*contd*

daily in and about the mines

Open workings							Total Underground and Open workings	Surface						Grand Total
Males					Females	Total Males and Females		Males				Females	Total Males and Females	
Foremen and Mates	Miners	Other skilled labour	Other unskilled labour	Total Males				Clerical and supervising staff	Skilled labour	Unskilled labour	Total Males			
IGNEOUS ROCK)—*contd*														
17	4	70	370	461	155	616	616	10		—	11		11	627
		3	12	15	11	26	26	—		1	1		1	27
9	182			191	20	211	211	6	38	47	91	57	148	359
26	186	73	380	667	186	853	853	16	39	48	103	57	160	1 013
204	1 041	1 632	2 095	5 972	1 904	7 876	7,876	226	347	1,062	1 611	544	2 155	10 031
123	1 276	1,290	1,281	6 970	1 302	8 272	8,272	207	514	1 082	1 803	524	2,362	10 634
+81	—235	+342	+814	—998	+602	—396	—396	+18	—167	—20	—194	+20	—174	—570
STONE														
12	43	23	51	138	57	195	195	—	8	15	43	9	52	247
14	48	61	80	203	41	244	244	1	1	26	28	10	38	282
—2	—6	—23	—29	—65	+16	—49	—49	—1	+27	—11	+15	—1	+14	—35

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STATISTICS OF MINES

Table

Number of workers and output of minerals during the

Province.	District and Mineral field.	Total Output.	Average number of persons employed						
			Underground.						
			Males.					Females.	Total Males and Females.
			Foreman and Mates.	Miners.	Other skilled labour.	Other unskilled labour.	Total Males.		
		Tons							GRA
Bihar . .	Singhbhum . .	13,936							Figures included
Bombay . .	Thana . . .	395							Figures included
Madras . .	Chingleput . .	25,603							Figures included
	Grand Total (Gravel) for 1937.	39,934							Figures included
	Grand Total of preceding year.	24,378	...	...	...	...	...	...	...
	Difference . .	+15,556	...	...	...	...	...	...	...
		Tons.							MU
Bombay . .	Bombay Suburban.	1,700							Figures included
	Thana . .	26,382							
	Total .	28,082							Figures included
United Provinces.	Jhansi . . .	2,383							Figures included
	Grand Total (Murum) for 1937.	30,465	...	...	...	...	...	...	...
	Grand Total of preceding year.	18,653	...	...	...	...	...	...	...
	Difference . .	+11,812	...	...	...	...	...	...	...
		Tons.							MUSCO
Rajputana .	Ajmer-Merwara .	7	...	...	...	...	...	...	...
	Total of preceding year.	21	...	...	...	...	...	...	...
	Difference .	—14,	...	...	...	...	...	...	...

DIX I—*contd.*

AND MINERALS—*contd*

No. 1—*contd.*

year 1937 at mines under the Indian Mines Act—*contd*

daily in and about the mines

Open workings							Total Underground and Open workings	Surface						Grand Total
Males					Females	Total Males and Females		Males				Females	Total Males and Females	
Foremen and Mates	Miners	Other skilled labour	Other unskilled labour	Total Males				Clerical and supervising staff	Skilled labour	Unskilled labour	Total Males			
VEL														
in those for Stone														
in those for Stone														
in those for Stone														
in those for Stone														
RUM														
in those for Stone														
in those for Stone														
in those for Stone														
VITE														
1			2	3										
1			6	7										

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STATISTICS OF MINES

Table

Number of workers and output of minerals during the

Province.	District and Mineral field.	Total Output.	Average number of persons employed						
			Underground.						
			Males.					Females.	Total Males and Females.
			Foremen and Mates.	Miners.	Other skilled labour	Other unskilled labour.	Total Males.		
									FIRE
Bengal . .	Burdwan .	Tons 7,916	..	...	...		...	...	...
Bihar .	Manbhum . .	4,280	..	.	...	...	...	...	...
Central Provinces.	Jubbulpore . .	21,106	...	...	...	...	...	...	...
		Tons.							
	Grand Total (Fire-clay) for 1937.	33,332	...		...	...	...	...	...
	Grand Total of preceding year.	22,817	...	.	...	...	...	...	...
	Difference .	+10,515	..	. .	...	...	...	...	...
		Tons.							CHINA
Bihar .	Bhagalpur . .	1,227	4	15	...	39	58	...	58
	Singhbhum .	6,180	..	...	...	...	...	...	...
	Total .	7,407	4	15	...	39	58	...	58
Delhi . .	Delhi . . .	3,538	2	31	9	6	48	...	48
Madras . .	Nellore . . .	79	...	...	...	...	...	...	...
	Grand Total (China Clay) for 1937.	11,024	6	46	9	45	106	...	106
	Grand Total of preceding year.	14,268	4	33	...	52	89	...	89
	Difference	—3,244	+2	+13	+9	—7	+17	...	+17

DIX I—*contd.*

AND MINERALS—*contd.*

No. 1—*contd.*

year 1937 at mines under the Indian Mines Act—*contd*

daily in and about the mines

Open workings							Total Underground and Open workings	Surface						Grand Total
Males					Females	Total Males and Females		Males				Females	Total Males and Females	
Foremen and Mates	Miners	Other skilled labour	Other unskilled labour	Total Males				Clerical and supervising staff	Skilled labour	Unskilled labour	Total Males			
CLAY														
2	60	8		70	38	108	108	3		20	23	15	38	146
1	33	23	10	67	18	85	85							85
6	5		149	160	152	312	312	3		26	29		29	341
9	98	31	159	297	208	505	505	6		46	52	15	67	572
6	4		145	155	156	311	311	3		26	29	2	31	342
+3	+94	+31	+14	+142	+52	+194	+194	+3		+20	+23	+13	+36	+230
CLAY.														
	4		37	41	19	60	116	1				11	12	130
16	86	3	118	223	344	567	567	28	25	127	180	195	375	942
16	90	3	155	264	363	627	685	29	25	127	180	206	387	1 072
	21		..	21		21	69							69
	8	2		10	2	12	12			..		1	1	13
16	1 9	5	155	295	365	660	706	29	25	127	181	207	388	1,154
22	72	20	144	258	276	534	623	29	31	140	200	184	384	1 007
−6	+47	−15	+11	+37	+89	+126	+143		−6	−13	−19	+23	+4	+47

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STATISTICS OF MINES

Table

Number of workers and output of minerals during the

Province.	Principal Mineral Field.	Total Output.	Average number of persons employed						
			Underground						
			Mines.						
			Average number of persons employed.	Mines.	Quarries.	Other Workings.	Total Mines.	Quarries.	Total Mines and Quarries.
		Tons.							
Total	Products	Total							
Total	All		Unascertained						
Unknown									

DIX I—*contd.*

AND MINERALS—*contd*

No. 1—*contd.*

year 1937 at mines under the Indian Mines Act—*contd*

daily in and about the mines

	Open workings								Surface						
	Males							Total Underground and Open workings	Males						Grand Total
	Firemen and Mates	Miners	Other skilled labour	Other unskilled labour	Total Males	Females	Total Males and Females		General and supervising staff	Skilled labour	Unskilled labour	Total Males	Females	Total Males and Females	
AY.															
	3	38		9	50	22	72	72		3		3		3	75
for Limestone															
	3	38		9	50	22	72	72		3		3		3	75
			16		16	16	32	32		3		3		3	35
	+3	+38	—16	+9	+34	+6	+40	+40							+40
TES															
		28	15	35	78	71	149	149	5		11	16		16	165
								6			2	2	10	12	18
		28	15	35	78	71	149	155	5		13	18	10	28	183
			6	7	13		13	18	2		2	4	8	12	30
		+28	+9	+28	+65	+71	+136	+137	+3		+11	+14	+2	+16	+153

APPEN

STATISTICS OF MINES

Table

Number of workers and output of minerals during the

Province	District and Mineral field.	Total Output.	Average number of persons employed — Underground — Males — Foremen and Males.	Miners.	Other skilled labour.	Other unskilled labour.	Total Males.	Females.	Total Males and Females.
		Tons.							APA
Madras	Trichinopoly	166				Figures included			
	Total of preceding year.	125	...	...	...	...	...	...	..
	Difference	+38	...	...	...	...	...	...	...
		Cwt.							ASBES
Rajputana	Ajmer-Merwara	9	...	...	...	...	...	...	...
		Tons.							OCH
Central Provinces	Chanda	63	1	4	...	..	5	...	5
	Jubbulpur	49	...	...	...	...		Figures included	
	Grand total (Ochre) for 1937.	112	1	4	...	...	5	...	5
	Grand total of preceding year.	70	...	7	...	...	7	...	7
	Difference	+42	+1	—3	...	..	—2	...	—2
		Tons.							KAO
Central Provinces	Jubbulpore	181	...	...	...	...	...	...	...
	Total of preceding year.	...	...	...	...	...	..	..	...
	Difference	+181	...	...	...	...	...	...	..

DIX I—*contd.*

AND MINERALS—*contd*

No. 1—*contd*

year 1937 at mines under the Indian Mines Act—*contd*

daily in and about the mines

	Open workings							Total Underground and Open workings	Surface						Grand Total
	Males					Females	Total Males and Females		Males				Females	Total Males and Females	
	Foremen and Mates	Miners	Other skilled labour	Other unskilled labour	Total Males				Clerical and supervising staff	Skilled labour	Unskilled labour	Total Males			
TITE															
in those for gypsum															
								—	—	—	—	—	—	—	—
								—	—	—	—	—	—	—	—
TOS.															
	1			3	4		4	4	—	—	—	—	—		4
RE.		3			3		3	8	—	—	3	3	4		15
in those for Kaoline															
		3			3		3	[illegible]	—	—	[illegible]	[illegible]	4	[illegible]	[illegible]
						—	—	[illegible]	1	—	—	1	[illegible]	[illegible]	[illegible]
		+3			+3	—	+3	+1	—1	—	+2	—1	+1	—1	—1
LINE															61
		4		—	4	5	9	9	1	—	—	1	—		
															44
				—	—	—	—	—	—	—	—	—	—	—	86
															—1
		+4		—	+4	+5	—1	—1	+1	—	—	—			

APPEN

STATISTICS OF MINES

Table

Number of workers and output of minerals during the

Province.	District and Mineral Sold	Total Output	Average number of persons employed						
			Underground.						
			Value						
			Persons and Males	Minors	Unpaid Adult Labour	Other and Child Labour	Total Males	Females	Total Males and Females
									KYA
		Tons							
Bihar	Monghyr	600	—	—	—		—		—
		Tons							GYP
Madras	Tri-Kinopoly	1,207					—	—	—
Punjab	Shelum	12,000					Figures included in		
	Grand Total [illegible] for 1927	13,575				—	—	—	—
	Grand Total of preceding year	7,150						—	—
	Difference	+6,426	—	—		—			—
									BAU
Bombay	Kaira	Tons 3,575		—		—	—	—	—
Central Provinces	Jubbulpur	9,575	—	—		—	—	—	—
	Total	13,150		—	—	—		—	—
									BER
Rajputana	Ajmer-Merwara	Tons 27	—	—			—	—	—
	Total of preceding year	99	1	—	12	—	13	—	13
	Difference	—72	—1	—	—12	—	—13	—	—13

DIX I—*contd.*

AND MINERALS—*contd.*

No 1—*contd*

year 1937 at mines under the Indian Mines Act—*contd*

daily in and about the mines

	Open workings								Surface						
	Males					Females	Total Males and Females	Total Underground and Open workings	Males				Females	Total Males and Females	Grand Total
	Foremen and Mates	Miners	Other skilled labour	Other unskilled labour	Total Males				Clerical and supervising staff	Skilled labour	Unskilled labour	Total Males			
NITE															
	3			52	55	62	117	117	1		20	21		21	138
SUM				19	19	22	41	41	1	5	11	17	36	53	94
those for Salt															
				19	19	22	41	41	1	5	11	17	36	53	94
				12	12	11	23	23	1	4	9	14	119	133	156
				+7	+7	+11	+18	+18		+1	+2	+3	−83	−80	−62
NITE	2	123	3		128	54	182	182		1	9	10	1	11	193
	5		17	34	56	102	158	158	2		11	13		13	171
	7	123	20	34	184	156	340	340	2	1	20	23	1	24	364
YL	3	35	1		39	2	41	41	2	1		3		3	44
	4	65			69		69	89		2		2	2	4	86
	−1	−30	+1		−30	+2	−28	−41	+2	−1		+1	−2	−1	9

APPEN

STATISTICS OF MINES

Table

Number of workers and output of minerals during the

Province.	District and Mineral field.	Total Output.	Average number of persons employed — Underground. Males. Foremen and Mates.	Miners.	Other skilled labour.	Other unskilled labour.	Total Males.	Females.	Total Males and Females.
		Tons.							FELS
Rajputana	Ajmer-Merwara	268	...	...	...	...	...	...	...
	Total of preceding year.	686	...	...	...	...	...	...	...
	Difference	—418	...	...	...	...	...	...	...
Central Provinces.	Jubbulpore	Tons. 45						FULLERS Figures included	
		Tons.							GRAPH
[illegible]	Vigagapatam	10	...	...	...	...	...	...	...
	Total of preceding year.	237	...	...	...	...	...	...	...
	Difference	—227	...	...	...	...	...	...	...
		Cwts.							TANTA
Bihar	Monghyr	11	2	4	2	2	10	...	10
	Grand Total (Metalliferous Mines) for 1937.	...	1,048	10,947	2,234	6,232	20,511	15	20,526
	Grand Total of preceding year.	...	966	13,192	2,344	8,418	24,920	32	24,952
	Difference	...	+82	—2,245	—60	—2,186	—4,409	—17	—4,426
	Grand Total (All Minerals) for 1937.	...	...	...	...	...	118,920	3,887	122,807
	Grand Total of preceding year.	...	...	...	...	...	123,423	7,301	130,724
	Difference	...	...	...	...	...	—4,503	—3,414	—7,917

DIX I—*contd*

AND MINERALS—*concld*

No 1—*concld.*

year 1936 at mines under the Indian Mines Act—*concld*

daily in and about the mines

	Open workings							Total Underground and Open workings	Surface						Grand Total
	Males					Females	Total Males and Females		Males				Females	Total Males and Females	
	Foremen and Mates	Miners	Other skilled labour	Other unskilled labour	Total Males				Clerical and supervising staff	Skilled labour	Unskilled labour	Total Males			
PAR															
	3	10		12	25		25	25		1		1		1	26
	4		9	14	27		2	27	1			1		1	28
	—1	+10	—9	—2	—2		—2	—2	—1	+1					—2
EARTH in those for Limestone															
ITE				2	2	5	7	7			2	2	5	7	14
		16	2	8	26	1	27	27							27
		—16	—2	—6	—24	+4	—20	—20			+2	+2	+5	+7	13
LITE		8	1		9	8	17	27	1	1		2		2	29
	1 62	21 341	3 832	10 086	37 521	19 661	57 182	77 708	2 007	3 649	7 62	13 281	5 720	19 001	96 709
	1 367	26 128	5 826	11 907	45 238	15 123	60 361	85 313	1 991	4 935	8 231	1 52	6 106	21 303	106 616
	+395	—4 787	—2 004	—1,321	—7 717	+4,538	—3 179	—7 605	+16	—1 286	—706	—1 976	—386	—2 362	—9 967
					48 268	24 429	72 747	195 554				52 387	19 917	72 304	267 858
					52 199	17 171	69 193	199 917				51 413	18 263	69 676	269 593
					—3 854	+7 303	+3 554	+4 63				+974	+1,654	+2,628	—1 735

APPEN

Table

Statement of total mining population in Coal Mines in British India

Name of Province.	Name of Coalfield or District	Total number attending work.								
		Males.				Females.				Total Males and Females.
		Under-ground.	Open working	Surface.	Total.	Under-ground.	Open working.	Surface.	Total.	
		Tons.								
Assam	Khasi and Jaintia.	39	.	40	79	...	...	54	54	133
	Makum	1,385	13	405	1,803	...	13	109	122	1,925
	Nazira	301	...	169	470	...	...	...	...	470
	Total	1,725	13	614	2,352	...	13	163	176	2,528
Baluchistan	Sor Range	45	2	.	47	...	...	...	...	47
	Khost	142	4	8	154	...	...	...	...	154
	Total	187	6	8	201	...	...	...	...	201
Bengal	Raniganj	51,277	424	12,117	63,818	...	223	6,199	6,422	70,240
Bihar	Raniganj	6,648	456	1,950	9,084	...	341	1,075	1,416	10,500
	Jharia	68,619	5,731	23,111	97,461	...	3,893	10,646	14,539	112,000
	Bokaro	3,790	6,894	2,345	13,029	...	3,945	685	4,630	17,659
	Giridih	5,301	22	779	6,102	...	11	677	688	6,790
	Karanpura	1 946	1,871	994	4,811	...	542	310	852	5,663
	Jainty	318	...	116	434	...	...	17	17	451
	Total	86,622	14,974	29,345	130,921	...	8,732	13,410	22,142	153,063
Central Provinces.	Betul	80	...	62	142	...	...	17	17	159
	Wardha Valley	2,032	...	506	2,538	...	...	132	132	2,670
	Pench Valley	7,283	716	2,543	10,542	...	700	1,027	1,727	12,269
	Total	9,395.	716	3,111	13,222	...	700	1,176	1,876	15,098
Orissa	Hingir Rampur	312	...	103	415	...	...	115	115	530
Punjab	Salt Range	1,984	46	1,135	3,165	...	...	22	22	3,187
	Grand Total	151,602	16,179	46,413	214,094	...	9,668	21,085	30,753	244 847

DIX I—*contd*

No 1-A.

on a day in the selected week in February 1938

Total number prevented from attend ng									
Males				Females				Total Males and Females	Grand Total
Under-ground	Op n work ing	Surface	Total	Under-ground	Open work ing	Surface	Total		
13		25	38			18	18	56	189
963	11	42	1 016		1	75	67	1 0 3	3 008
85		41	1[illegible]7					127	507
1 061	11	109	1 181		1[illegible]	[illegible]2	85	1 [illegible]66	3 [illegible]4
									47
									15[illegible]
									[illegible]01
4 465	12	816	5 293		10	656	666	5 959	76 199
802	30	84	916		21	3	74	[illegible]00	11 490
2 450	87	535	3 07[illegible]		63	287	350	3 4[illegible]2	115 4[illegible]2
193	1 [illegible]64	289	1 746		[illegible]01	28	7 9	2 4[illegible]5	20 134
3 990	8	136	4 134		5	103	108	4 24	11 0[illegible]
1 238	519	43	1,800		160	4	164	1 984	7 647
13		3	16					16	467
8 686	1 903	1 090	11 684		9 0	4 5	1 415	13 1[illegible]9	166 19[illegible]
10			10					10	16[illegible]
75		10	85			6	6	91	[illegible]761
896	39	141	1 076		[illegible]6	59	85	1 161	13 4[illegible]0
981	39	151	1 171		26	65	91	1 [illegible]6[illegible]	16 369
3		2	5					5	[illegible]
88		15	103					103	[illegible]
15 284	1 9 0	2 163	19 437		1 013	1 269	2,257	21 [illegible]4	[illegible]

APPEN

Table

Average hours worked per week in

Mineral Field.	Underground.					
	Overmen and Sirdars. — Foremen and Mates.	Miners.	Loaders.	Skilled Labour.	Unskilled Labour.	Females.
Jharia Coalfield (Bihar)	49	45	45	46	46	45
Raniganj ,, (Bengal)	50	46	46	48	47	45
Giridih ,, (Bihar)	42	42	40	46	46	44
Assam Coalfields	47	46	48	46	48	...
Punjab ,,	42	39	36	42	43	...
Baluchistan ,,	35	36	37	40	36	...
Pench Valley Coalfield (Central Provinces)	50	48	49	48	50	49
Bihar Mica	45	45	...	47	46	...
Madras Mica	47	47	...	47	47	...
Central Provinces Manganese	49	48	...	49	49	...
Central Provinces Limestone	...	...	...	...	...	...
Bihar Iron	...	...	...	...	...	...
Punjab Salt	38	43	...	43	41	23
Bihar China Clay	44	39	...	...	38	...
Punjab Slate	...	...	...	...	...	...

DIX I—*contd.*

No. 2.

each important mining field during the year 1937

Open workings						Surface			
Overmen and Sirdars — Foremen and Mates	Miners	Loaders	Skilled Labour	Un skilled Labour	Females	Cler cal and Supervising Staff	Skilled Labour	Un skilled Labour	Females
49	47	46	47	45	46	53	50	50	49
47	45	44	47	46	45	52	50	50	49
48	45		48		30	49	47	44	48
45	45	45			45	49	50	50	48
43	44	40		48		53	46	46	48
	—					36	4—	44	
52	52	51	52	52	51	53	52	52	51
44	44	..	45	44	40	47	47	49	47
48	46		46	46	47	46	48	46	46
48	46		47	44	45	48	47	43	43
50	49		49	50	47	49	50	49	47
49	49		49	49	49	50	50	50	50
54	54					51	46	47	
46	47		45	46	46	46	46	46	43
40	40		41	41		48	48	48	

APPEN

Table

Analysis of figures relating to

Province.	Coalfield.	Coal.					
		Opening stock.	Raisings.	Total.	Despatches.	Colliery consumption.	Coal delivered for coking.
		Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Assam	Khasi & Jaintia Hills.	5,771	2,735	8,506	6,869	...	...
	Makum	...	218,488	218,488	204,100	11,860	2,528
	Nazira	411	22,427	22,871	22,280	591	...
Baluchistan	Baluchistan	230	10,624	10,854	10,336	..	...
Bengal (and part of Bihar).	Raniganj	273,067	7,196,324	7,469,391	6,795,024	461,148	60,665
Bihar	Jharia	434,875	9,601,230	10,036,105	7,748,284	528,489	1,195,397
	Bokaro	3,096	2,309,170	2,312,266	2,249,446	44,515	14,311
	Karanpura	5,462	534,328	539,790	506,636	15,588	...
	Giridih	143,512	674,794	818,306	728,553	29,607	...
	Jainty	7,433	47,490	54,923	45,764	5,448	...
Central Provinces	Betul	235	5,657	5,892	3,815	1,020	...
	Pench Valley	14,129	1,234,233	1,248,362	1,164,519	71,253	...
	Wardha Valley	5,058	264,269	269,327	253,730	14.920	...
Orissa	Hingir-Rampur	1,026	47,127	48,153	40,944	4,936	...
Punjab	Salt Range	2,385	166,632	169,017	162,254	3,418	...
	Total 1937	896,723	22,335,528	23,232,251	19,942,554	1,192,793	1,272,901

)IX I—*contd.*

Io. 3.

ıe output of Coal and Coke, 1937.

		Coke									
Coal despatched to coke factories	Closing stocks	Opening stocks		Coke made		Despatches		Colliery consumption		Closing stocks	
		Hard	Soft	Hard	Soft	Hard	Soft	Hard	Soft	Hard	Soft
Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons
	1,637			523		449		79	..		
	..										
..	518	..							..		
	1o2,554	92	287	2 601	40 666	2 744	39 743		327	149	883
1 848 521	563 9 3	3 912	10 214	88 564	791 666	88 140	786 126	13o	2 368	3 901	13 356
6 808	3 991	35	119	3 546	4 813	3 502	4 915	39	11	41	6
	17 566										
73 973	60 146										
	3 711										
	1 0o7										
	12,590	16								16	
	677				..						
	2,273	..									
	3 315										
1 928 752	824 021	4 0o6	10 620	95,439	837,145	94 83o	830 784	5o3	2 706	4 107	14 275

APPENDIX I—*contd.*

Table No. 4.

Numbers of mines opened, closed and inspected, during the year 1937.

Province.	District and Mineral field.	Number of mines under the scope of the Act.	Number of mines.				Inspections.	
			Worked under mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.
			COAL.					
Assam	Khasi and Jaintia Hills	1	...	1	...	...	1	1
	Lakhimpur—Makum Coalfield	4	4	.	...	...	3	6
	Naga Hills—Nazira Coalfield	1	...	1	...	...	2	2
Baluchistan	Baluchistan Coalfield	17	..	17	8	6	10	15
[illegible]al (and part of Bihar).	Raniganj Coalfield	226		70	43	15	234	959
Bihar	Jharia Coalfield	251			71			1,418
	Bokaro Coalfield	8						20
	Karanpura	6						7
	Giridih	4						
	Jaintia C	7						
Central Provinces.	Betul		1					
	Pench Valley		20					
	Wardha Valley							
Orissa	Hingir-Rampur Co							

APPENDIX I—*contd.*

Table No. 4—*contd*

Numbers of mines opened, closed and inspected, during the year 1937—*contd*

ROVINCE	District and Mineral field	Number of mines under the scope of the Act	Number of mines: Worked under mechanical power	Number of mines: Not worked by mechanical power	Number of mines: Opened during the year	Number of mines: Closed during the year	Inspections: Number of mines inspected	Inspections: Number of inspections
				COAL—*contd.*				
jab	Salt Range Coalfield	40		40	18	13	25	34
	Grand Total (Coal) for 193	6 4	368	236	146	55	604	2 566
	Grand Total of preceding year	594	355	149	65	54	536	2 784
	Difference	+10	+13	+87	+81	+1	+68	−218
				IRON ORE.				
ar	Singhbhum	5		5	1		3	8
	Grand Total (Iron Ore) for 1937	5		5	1		3	8
	Grand Total of preceding year	7		7			7	8
	Difference	−2		−2	+1		−4	
				MANGANESE ORE.				
ar	S nghbhum	14		14	3		12	13
mbay	North Kanara	3		3	3			
	Panch Mahals	2	2				2	3

APPENDIX I—*contd.*

Table No. 4—*contd.*

Numbers of mines opened, closed and inspected, during the year 1937—*contd.*

Province.	District and Mineral field.	Number of mines under the scope of the Act.	Number of mines.				Inspections.	
			Worked under mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.
			MANGANESE ORE—*contd.*					
Central Provinces.	...	67	3	64	37	3	36	3
Madras	...	12	1	11	3	2	6	6
	Grand Total (Manganese Ore) for 1937.	98	6	92	46	6	56	5
	Grand Total of preceding year.	63	5	58	23	7	39	4
	Difference	+35	+1	+34	+23	—1	+17	+1
			GOLD.					
Bihar	...	3	...	3	1	1	1	2
	Total of preceding year	3	...	3	1	1	1	1
	Difference	...	...	...	...	...	...	+1
			CHROMITE ORE.					
Baluchistan	...	39	...	39	1	...	9	9
Bihar	...	13	...	13	3	...	10	10
Bombay	...	1	...	1	...	...	...	...
	Grand Total (Chromite Ore) for 1937.	53	...	53	4	...	19	19
	Grand Total of preceding year	49	...	49	...	...	9	9
	Difference	+4	...	+4	+4	...	+10	+10

APPENDIX I—*contd.*

Table No 4—*contd*

Numbers of mines opened, closed and inspected, during the year 1937—*contd*

Province	District and mineral field	Number of mines under the scope of the Act	Number of mines: Worked under mechanical power	Number of mines: Not worked by mechanical power	Number of mines: Opened during the year	Number of mines: Closed during the year	Inspections: Number of mines inspected	Inspections: Number of inspections
				COPPER ORE.				
Bihar	Singhbhum	5	-	5	2		2	6
	Total of preceding year	3	2	1	1		1	6
	Difference	+2	—2	+4	+1		+1	
				MICA.				
Bihar	.	770	34	736	350	277	168	168
Madras	.	103	13	90	45	23	72	72
Rajputana		36		36	20	24	14	14
	Grand Total (Mica) for 1937	909	47	862	451	334	244	254
	Grand Total of preceding year	699	40	659	305	234	134	145
	Difference	+210	+7	+203	+146	+90	+110	+109
				SALT.				
Panjab		3	1	2			3	3
	Total of preceding year	3	2	1			2	2
	Difference		—1	+1				+

APPENDIX I—*contd.*

Table No. 4—*contd.*

Numbers of mines opened, closed and inspected, during the year 1937—*contd.*

Province.	District and Mineral field.	Number of mines under the scope of the Act.	Number of mines: Worked under mechanical power.	Number of mines: Not worked by mechanical power	Number of mines: Opened during the year.	Number of mines: Closed during the year.	Inspections: Number of mines inspected.	Inspections: Number of inspections.
			MAGNESITE.					
Madras	Salem	3	..	3	..	1	2	3
	Total of preceding year	3		3		...	1	1
	Difference	.		...	.	+1	+1	+2
			STEATITE.					
bar	...	4	..	4	1	.	2	3
ral Pro- ces.	...	3	.	3	1	...	4	4
	..	2		2	..	1	1	1
Pro-	...	14		14	8	8	17	17
	Grand Total (Steatite) for 1937	23	..	23	10	9	24	25
	Grand Total of preceding year	25	...	25	12	10	10	11
	Difference	—2	.	—2	—2	—1	+14	+14

APPENDIX I—*contd.*

Table No 4—*contd*

Numbers of mines opened, closed and inspected, during the year 1937—*contd*

Province	District and Mineral field	Number of mines under the scope of the Act	Number of mines: Worked under mechanical power	Number of mines: Not worked by mechanical power	Number of mines: Opened during the year	Number of mines: Closed during the year	Inspections: Number of mines inspected	Inspections: Number of inspections
					SLATE			
Bihar	Monghyr	5		5	1	2	7	7
Punjab		14		14	2	1	13	13
	Grand Total (Slate) for 1937	*19*		*19*	*3*	*3*	*20*	*20*
	Grand Total of preceding year	21		21	7	5	11	11
	Difference	—2		0	—4	—2	+9	+9
					LIMESTONE			
Bihar		14		14	2	1	15	18
Central Provinces		19	2	17	4	4	17	19
Madras		1		1			1	1
Punjab		3	1	2			4	4
Sind							1	1
	Grand Total (Limestone) for 1937	37	3	34	6	5	38	43
	Grand Total of preceding year	47	3	44	11	6	32	35
	Difference	—10		—10	—5			+8

APPENDIX I—*contd.*

Table No. 4—*contd.*

Numbers of mines opened, closed and inspected, during the year 1937—*contd.*

Province.	District and Mineral field.	Number of mines under the scope of the Act.	Number of mines.				Inspections.	
			Worked under mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.
			STONE.					
Bengal	...	3	..	3	...	...	4	4
Bihar	...	53	...	53	8	4	62	68
Bombay	...	21	2	19	5	4	32	32
Central Provinces.	...	2	...	2	...	...	...	...
Delhi	Delhi		...	...	...		1	2
	...	11	1	10	6	1	14	14
Punjab	...	4	.	4	...	...	10	10
Sindh	...	1	..	1	..	...	2	2
United Provinces.	...	13	...	13	2	1	34	39
	Grand Total (Stone) for 1937	108	3	105	21	10	159	171
	Grand Total of preceding year	104	3	101	9	11	138	144
	Difference	+4	...	+4	+12	—1	+21	+27

APPENDIX I—*contd.*

Table No 4—*contd*

Numbers of mines opened, closed and inspected, during the year 1937—*contd.*

Province	District and Mineral field	Number of mines under the scope of the Act	Number of mines: Worked under mechanical power	Number of mines: Not worked by mechanical power	Number of mines: Opened during the year	Number of mines: Closed during the year	Inspections: Number of mines inspected	Inspections: Number of inspections
				SANDSTONE.				
Bihar	Shahabad	2		2			6	6
United Provinces							2	2
	Grand Total (Sandstone) for 1937	3		2			8	8
	Grand Total of preceding year	3		3			7	7
	Difference	−1		−1			+1	+1
				FIRE CLAY.				
Bengal		2		2	1		-	2
Bihar		5		5			7	9
Central Provinces		3	2	1			1	1
Orissa							1	1
	Grand Total (Fire Clay) for 1937	10	2	8	1		11	13
	Grand Total of preceding year	4	2	2			2	24
	Difference	+6		+6	+1		−10	−11

APPENDIX I—*contd.*

Table No. 4—*contd.*

Numbers of mines opened, closed and inspected, during the year 1937—*contd.*

Province.	District and Mineral field.	Number of mines under the scope of the Act.	Number of mines.				Inspections.	
			Worked under mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.
				CHINA CLAY.				
Bihar	...	9	...	9	3	2	8	10
Delhi	...	5		5	4	4	9	13
Madras	..	1	...	1	1	...	...	...
	Grand Total (China Clay) for 1937.	15	...	15	8	6	17	23
	Grand Total of preceding year	14	...	14	6	5	9	9
	Difference	+1	...	+1	+2	+1	+8	+14
				CLAY.				
Bengal	Burdwan	3	1	2	1	1	4	4
	Total of preceding year	1	1		...	...	3	5
	Difference	+2	...	+2	+1	+1	+1	—1

APPENDIX I—*contd.*

Table No 4—*contd*

Numbers of mines opened, closed and inspected, during the year 1936—*contd*

Province	District and Mineral field	Number of mines under the scope of the Act	Number of mines: Worked under mechanical power	Number of mines: Not worked by mechanical power	Number of mines: Opened during the year	Number of mines: Closed during the year	Inspections: Number of mines inspected	Inspections: Number of inspections
					BARYTES			
Madras		5		5	4		5	5
	Total of preceding year	2		2			4	4
	Difference	+3		+3	+4		+1	+1
					ASBESTOS			
Rajputana		1		1	1			
	Total of preceding year	0						
	Difference	+1		+1	+1			
					OCHRE			
Central Provinces		1		1	1			
	Total of preceding year	1		1		1	1	1
	Difference				+1	−1	−1	−1
					KAOLINE			
Central Provinces		1		1				
	Total of preceding year	1		1				
	Difference							

APPENDIX I—*contd.*

Table No. 4—*contd.*

Numbers of mines opened, closed and inspected, during the year 1937—*contd.*

Province.	District and Mineral field.	Number of mines under the scope of the Act.	Number of Mines. Worked under mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Inspections. Number of mines inspected.	Number of inspections.
				GYPSUM.				
Madras	...	4	...	4	1	1	...	...
	Total of preceding year	4	...	4	...	1	3	4
	Difference	...	...	...	+1	...	+3	+4
				BERYL.				
Rajputana	...	3	...	3	1	1	2	2
	Total of preceding year	8	...	8	7	4	2	2
	Difference	—5	...	—5	—6	—3	...	...
				GRAPHITE.				
Madras	...	1	...	1	...	...	...	...
Central Provinces.	...	...	...	...	...	...	1	1
	Grand Total (Graphite) for 1937	1	...	1	..	..	1	1
	Total of preceding year	2	...	2	...	...	1	1
	Difference	—1	...	—1	...	...	...	...
				BAUXITE.				
Bombay	...	1	...	1	1	...	1	1
Central Provinces.	...	2	...	2	...	...	4	4
	Grand Total of (Bauxite) for 1937	3	...	3	1	...	5	5
	Total of preceding year	...	...	...	...	...	3	3
	Difference	+3	...	+3	+1	...	+2	+2

APPENDIX I—*contd.*

Table No. 4—*concld.*

Numbers of mines opened, closed and inspected, during the year 1937—*concld*

Province	District and Mineral field	Number of mines under the scope of the Act	Number of mines: Worked under mechanical power	Number of mines: Not worked by mechanical power	Number of mines: Opened during the year	Number of mines: Closed during the year	Inspections: Number of mines inspected	Inspections: Number of inspections
				FELSPAR.				
jputana	. . . .	3		3	1	1	2	2
	Total of preceding year	5		5		3	3	3
	Difference	−2		−2	+1	−2	−1	−1
				MUSCOVITE.				
jputana	. . .	1		1		1		
	Total of preceding year	1		1	1			
	Difference				−1	+1		
				KYANITE.				
har	. .	1		1	1			
	Total of preceding year							
	Difference	+1		+1	+1			
				TANTALITE				
har	.	1		1		1		
	Total of preceding year	1		1	1			
	Difference				−1	+1		
	Grand Total (Metalliferous Mines) for 1937	1,321	63	1,258	564	371	626	681
	Grand Total of preceding year	1,469	79	1,390	497	359	535	581
	Difference	−148	−16	−132	+67	+12	+91	+96
	Grand Total (All Minerals) for 1937	1,925	431	1,494	710	426	1,230	3,216
	Grand Total of preceding year	1,973	434	1,539	562	413	1,071	3,376
	Difference	−48	−3	−45	+148	+13	+159	−160

APPENDIX I—*contd.*

Table No. 5.

The following table shows the fluctuations in the output of the principal minerals raised from mines classed under the Indian Mines Act. The other minerals raised are apatite, asbestos, barytes, bauxite, beryl, chinaclay, clay, felsper, fireclay, fuller's earth, graphite, gypsum, kyanite, magnesite, muscovite, ochre, stone, slate, steatite and tantalite.

Year.	Coal.	Manganese ore.	Mica.	Limestone.	Salt.	Gold.	Copper ore.	Wolfram ore.	Iron ore.	Chromite ore.	Tin ore.	Lead ore.	Silver.
	Tons.	Tons.	Cwts.	Tons.	Tons.	Troy ozs.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Troy ozs.
1928	21,515,796	716,626	44,639	1,404,578	145,543	7	18,055	622	1,206,754	17,167	2,777	443,654	7,404,728
1929	22,308,174	750,908	49,437	1,313,647	148,496	30	76,831	1,061	1,436,385	21,054	3,384	404,561	7,280,517
1930	22,683,861	623,678	52,519	1,143,312	147,276	30	123,749	1,509	1,132,893	30,488	3,001	530,119	7,054,206
1931	20,514,597	347,373	46,177	863,236	134,016	..	153,636	969	590,176	14,938	2,552	397,679	5,900,460
1932	18,719,587	88,119	32,643	725,378	150,286	50	175,375	848	673,434	7,866	2,957	372,586	5,998,956
1933	18,160,681	53,240	41,005	1,120,110	145,838	267	201,722	836	653,239	9,770	3,209	454,791	6,054,069
1934	20,243,977	221,282	55,555	940,860	154,955	858	328,676	1,333	834,477	9,356	3,890	443,489	5,792,033
1935	21,014,469	422,847	58,553	1,000,308	150,515	1,255	350,861	2,549	1,179,050	19,030	4,383	469,286	5,825,939
1936	20,583,982	624,830	82,077	1,007,957	151,523	1,376	357,194	3,140	1,401,530	28,142	4,664	468,842	5,952,000
1937	22,335,528	800,280	94,811	1,318,598	163,813	26	371,458	...*	1,587,362	35,387	...*	...*	...

* The production in previous year was from Burma.

Table No. 6.

The following table shows the amount of coal raised, the average number of persons working daily and the death-rates during the years 1928-1937 in respect of coal mines under the Indian Mines Act :—

Year.	Amount of coal raised.	Average number of persons working daily below and above ground.	Number of deaths below and above ground.	Death-rates.	
				Per 1,000,000 tons raised.	Per 1,000 persons working daily below and above ground.
1928 . . .	21,515,796	164,139	218	10·13	1·33
1929	22,308,174	165,658	194	8·70	1·17
1930	22,683,861	169,601	211	·30	1·25
1931	20,514,597	158,267	185	9·02	1·17
1932	18,719,587	148,489	151	8·07	1·02
1933	18,160,681	144,707	124	6·83	0·86
1934	20,243,977	151,375	157	7·76	1·04
1935	21,014,469	159,254	264	12·56	1·66
1936	20,583,982	162,917	420	20·40	2·58
1937	22,335,528	171,149	200	8·95	1·17

APPENDIX I—*contd*

Table No 7

Aggregate horse power and purpos for use of electric motors installed both on surface and underground at Coal Mines under the Indian Mines Act

Coalfield	Horse power on surface						Horse power below ground					Total horse power of motors installed
	Winding	Ventilation	Haulage	Coal washing or screening	Miscellaneous	Total	Haulage	Pumping	Portable machinery	Miscellaneous	Total	
Assam		117	123	7	186	433	180				180	615
Bokaro	200	135	690	65	1 161	[illegible] 161	290	0	55		1 055	3 213
Central Provinces		83	100		63	[illegible]18	796	86	315	30	1 497	1 6 5
Giridi	165	365	0	418	1 2 1		7 9	4 205	10	2	5 0 6	6 367
Jharia	[illegible] 7[illegible]3	1 [illegible]	[illegible] 315	1,186	1 685	9 [illegible]11	[illegible] 80	21 8 3	3 80	1 [illegible] 4	35 3 6	44 56
Karanpura	—	[illegible]5	750	95	344	1 264		453	107		560	1 8[illegible]4
Punjab			25			[illegible]						25
Raniganj	[illegible] 235	1 435	350	1 0[illegible]6	887	6 [illegible]9	7 189	11 6 0	3 127	337	2 3[illegible]8	[illegible]8,518
Total	5 433	3 517	4 415	2 67[illegible]	4 [illegible]74	[illegible]0 840	16 541	39 607	403	[illegible] 3	65 964	86 804

Table No 8

Number of Mines under the Indian Mines Act where electric power is used, and the aggregate horse power of electric motors installed

Province	Minerals worked				Total horse power of motors installed
	Coal		Sundry Minerals		
	Number of mines	Horse power	Number of mines	Horse power	
Assam	2	615			615
Bengal	43	24 4 0	1	58	24 538
Bihar	69	60 609	6	4 051	64 060
Bombay			1	166	166
Central Provinces	9	1 6 5	7	560	2 235
Madras			3	441	441
Punjab	1	[illegible]5	[illegible]	[illegible]	
Total	124	86 804	20		

APPENDIX I—*contd.*

Table No. 9.

Number and type of coal-cutting machines at work in Coal Mines under the Indian Mines Act.

Name of machine.	Chain.	Bar.	Percussive.	Power.		Total number of machines.
				A. C.	D. C.	
Diamond	1	...	...	1	...	1
Goodman	65	...	...	45	20	65
Hardy	...	..	6	6	...	6
Mavor and Coulson	26	29	...	57	1	58
Sullivan	10	...	...	10	...	10
Total	105	29	6	119	21	140

Jharia coalfield	46 machines	Total number of square feet undercut—6,890,160.
Raniganj coalfield	78 ,,	
Giridih coalfield	1 machine	
Karanpura coalfield	5 machines	
Bokaro coalfield	1 machine	
Central Provinces coalfield	9 machines	

Table No. 10.

Number of mechanical ventilators in use at Coal Mines under the Indian Mines Act in 1937.

Assam.	Baluchistan.	Bengal.	Bihar.	Central Provinces.	Orissa.	Punjab.	Total.
9	...	33	64	9	...	2	117

APPENDIX I—*concld*

Table No. 11.

Safety lamps in use at Coal Mines under the Indian Mines Act

Name of manufacturer	Number in use in							
	Assam	Baluchistan	Bengal	Bihar	Central Provinces	Orissa	Punjab	Total
			Electric.					
Ceag	320			1 629				1 949
Oldham			..					
Concordia			1 175	502	..			1 677
			Flame type.					
Davies	389		4 8 8	3 139	5		6	8 417
Hailwood	1 069		2 855	11 796				5 200
Naylor			4	234				238
Patterson			269	1 386				1 655
Premier			27	968				995
Thomas Williams			7 735	5 076			..	12 811
Wolfs		6						6
Total	1 778	6	16 423	24 730	5		6	42 948

9 731 were locked by lead seals and 33 217 by magnetic means

Table No 12.

Statement of explosives used during the year 1937 at mines under the Indian Mines Act

Name of explosives.	Quantity of explosives used in lbs in						
	Coal mines	Mica mines	Manganese mines	Limestone mines	Stone mines	Other mines	Total
Dynamite	9 199	17 009	5	20	2 433	2 177	23 836
Gelignite	59 641	176 091	91 117	9 020	2 125	449 474	787 68
Monobel	42 722			1 110			43 832
Stonobel	167 580						167 580
Dynobel	242						242
Robbinite	15				..		15
Rannkol	9 960						9 960
Liquid Oxygen	112 881	..					112 881
Gunpowder	2 751 418	10 014	110 573	270 918	159 684	409 305	3 711 912
Picric Powder					1 846		1 846
Number of detonators used	778 059	1 478 078	572 947	8 409			43 596

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age and occupation of persons killed.	Name of mineral worked.	Cause of accident and remarks.
			FALLS OF ROOF AND SIDES—*contd.*			
			(a) Falls of roof			
14	14th March, 6-30 A.M.	No. 2 Gambrala Mine, Daudot P. O., Punjab.	The Executor of the Estate of late Lala Shanker Das.	Sultan Ali, (*m.*), 21. *Coal cutter.* Rajwali, (*m.*). 33, *Carpenter.*	Coal	While at work on a longwall face, two persons were struck and killed on the spot by a mass of stone, 7′ × 2′—3′ × 1′, which fell from the roof at a height of about 3 feet. Inspection and enquiry made.
15	18th March, 1-30 A. M.	Ekra Khas Mine, Bansjora P. O., Bihar.	Maharaja S. C. Nandi.	Tahalu Gope, (*m.*, 45, *Coal-cutter*	Coal	Deceased entered a place from where timber had been withdrawn in order to retrieve his basket. A mass of coal, 20′ × 15′ × 2′ thick, fell from the roof and killed him instantly. Inspection and enquiry made.
16	20th March, 7-30 A. M.	Budroochuck Mine, Sijua P. O., Bihar.	Budroochuk Coal Mining Co., Ltd.	(1) Kishan Majhi, (*m.*), 42, (2) Badan Majhi, (*m.*), 35, (3) Somra Majhi (*m.*), 30, *Coal-cutters.*	Coal	As four coal-cutters were walking up a main haulage road at the termination of their relay a mass of roof stone, 24′ × 8′ and from 6″ to 8″ thick, fell from a height of 8 feet. Three of them were killed instantly and the other was seriously injured. Inspection and enquiry made.
17	9th April, 9-15 P. M.	Dobari Mine, Jharia P. O., Bihar.	Keshavji Pitamber, Receiver.	Motka Manjhi (*m*), 25, Sitla Manjhi (*m.*), 30, *Coal-cutters.*	Coal	The deceased were dressing down roof coal in a gallery, when a mass of coal, 5′ × 6′ × 2′ thick, fell on them from a "slip" at a height of 8 feet. One was killed on the spot and the other died shortly afterwards. Inspection and enquiry made.
18	14th April, 2-30 A. M.	Central Jinagora Mine, Jharia P. O., Bihar.	Central Jinagora Coal & Coke Agency.	Haril Mahato, (*m.*), 30. *Coal-carrier.*	Coal	While deceased was loading coal in a gallery, a mass of stone, 4′-6″ × 4′ and from 2′ to 4″ thick, fell on him from the roof at a height of 6 feet, and he died about three months later. Inspection and enquiry made.

19	14th April, 3 P M	Serampur Mine Giridih P O, Bihar	Government of India State Railway Coal Dept	(1) Habib Mech, (m), 32, (2) Akloo Dusad, (m), 45, *Coal-cutters*	Coal	While a gang of miners was engaged in cleaning an old roadway, 5-6" high, a "bump" occurred in the goaf causing a mass of coal 10' x 10 x 3' to fall from a hidden "slip" in the roof Two miners were killed on the spot and another received serious injuries Inspection and enquiry made
20	18th April, 8 A M	No 8 Gandhala Mine Dandot P O, Punjab,	Wah Stone & Lime Quarry Ltd, and Pandit Gian Chand	Bushmat Ali, (m), 45, *Coal-cutter*	Coal	While deceased was working on a longwall face a mass of stone fell on to his head from the roof at a height of 2½ feet He sustained fatal injuries Inspection and enquiry made
21	5th May, 5 A M,	Poniati Mine Charanpur P O, Bengal,	Poniati Collieries Ltd	Karam Singh (m), 30, *Tub-setter-mining*	Coal	While props were being withdrawn from a depillaring area deceased attempted to recover a prop dislodged by a Sylvester prop-drawer He was killed by a fall of a mass of roof coal, 25' x 10' x 2', which suddenly fell from a height of 16 feet Inspection and enquiry made
22	7th May, 11 30 A M	Chasnalla Mine Pathardih P O Bihar	Chasnalla Coal Co	Sarkar Manjhi, (m), 35, *Coal cutter*	Coal	While pushing an empty tub on a tramline deceased was struck and killed instantly by a fall of roof coal, 10' x 7'—6" x 4', which suddenly became dislodged from between three "slips" at a height of about 8 feet Inspection and enquiry made
23	23rd May, 4-30 A M	Ganhoodih Mine Jharia P O, Bihar	S. B Banerjee	Parbati Chatwarin, (f) 42, *Coal-loader*	Coal	While a female coal-carrier was filling a basket with coal in a gallery, 12 feet high in which roof coal was being worked a mass of coal 5 x 2'—6" x 1'—3", fell from a slip in the roof, She was killed instantly Inspection and enquiry made.
24	11th June, 11-15 A M	Jamadoba Mine, Jealgora P. O, Bihar	The Tata Iron & Steel Co Ltd	Metabdin (m), 40, *Labourer*	Coal	A timberman and his two assistants were set to withdraw three props in a depillaring area. They had withdrawn two props and while the third was being withdrawn a mass of roof stone, 10 x 8' x 6', became dislodged from a height of 12 feet and struck deceased who succumbed to his injuries shortly afterwards Inspection and enquiry made
25	19th June 1-30 P M,	Namdang Mine Margherita P O, Assam	Assam Railways & Trading Co, Ltd	Samora Pathan (m) 45 *Coal cutter*	Coal	While a miner was levering down coal from the roof of an "opening" a piece of coal, weighing 100 lbs fell from a height of 10 feet He was struck on the head and killed instantly Inspection and enquiry made
	23th June 11 30 P M	Jharia Khas Mine, Jharia P O Bihar	Standard Coal Co Ltd	Charan Bhuia, (m) 26, *Loader*	Coal	While coal was being loaded in a pillaring area in a seam, 26 feet thick, a mass of coal, 6 x 4' x 3', fell from the roof Deceased was struck by the falling coal and received fatal injuries Inspection and enquiry made
	30th June 4 35 A M	Bansdeopur Mine Kusunda P O Bihar	New Bansdeopur Coal Co, Ltd	Bolorum Bar (m) 50, *Coal cutter*	Coal	Deceased entered a gallery to load slack coal where roof coal was being cut A mass of coal, 18 x 6' x 1—3, fell from the roof at a height of 10 feet and he sustained fatal injuries Inspection and enquiry made

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age and occupation of persons killed.	Name of mineral worked.	Cause of accident and remarks.
			FALLS OF ROOF AND SIDES—*contd.*			
			(*a*) Falls of roof—*contd.*			
28	30th June, 3-50 P.M.	Standard (Jharia Khas) mine, Jharia P.O., Bihar.	Standard Coal Co. Ltd	Lachoo Noonia, (*m*), 38, *Loader.*	Coal	Deceased was struck by a mass of coal, weighing about 3 cwt., which fell on him from the roof of a gallery 20 feet high where roof coal was being taken down by blasting. He sustained serious injuries which proved fatal eighteen days later. Inspection and inquiry made.
29	8th July. 3-30 P.M.	Jainty Central mine, Karmatar P.O., Bihar.	Jainty Central Colliery Limited.	Babulal (Jalpha) Manjhi, (*m*), 35, *Coal-cutter.*	Coal	While deceased was at work in a gallery, 4½ feet high, a mass of roof stone, 9′ × 6′ and from 1″ to 1′ thick, fell unexpectedly and killed him instantly Inspection and enquiry made
30	11th July, 3-30 A.M.	Upper Ghorawari Mine, Junnordeo P. O., Central Provinces.	Hirdagarh Collieries, Ltd.	(1) Sheikh Babu, (*m.*), 35, *Coal-cutter.* (2) Guttu, (*m*), 35. (3) Kashilal, (*m*), 30, *Loaders.*	Coal	Coal was being loaded after blasting a "stook" in a depillaring area when a mass of shale-roof, about 10′ × 10′ × 8″ thick, suddenly fell from a height of 15 feet killing two loaders instantly. A miner sustained serious injuries to which he succumbed in hospital half an hour later. Inspection and enquiry made.
31	15th July, 5 A.M.	Newton Chickli Mine, Parasia P. O., C. P.	Newton Chickli Collieries Ltd.	Sheik Subhan, (*m.*), 45, *Coal-cutter.*	Coal	While robbing coal from a fenced off gallery deceased was killed by a mass of stone, about 3′ × 2′ × 1′—6″ thick, that fell on him from the corner of a pillar at a height of about 8 feet. Inspection and enquiry made.
32	15th July, 2 P.M.	West Bhuggutdih Mine, Jharia P. O., Bihar.	West Bhuggutdih Colliery Co.	Jai Ram Meah, (*m*). 35, *Coal-cutter.*	Coal	Deceased left his working place and went through a fence into a goafed area to load fallen coal. He was killed by a mass of roof coal, weighing about 1½ tons, which fell from a height of about 12 feet. Inspection and enquiry made.
33	17th July, 9-30 A.M.	No. 3, North Gambrala mine, Dancot P. O., Punjab.	The Executors of the Estate of late Lala Shanker Das.	Kalla, (*m.*), 25, *Coal-cutter.*	Coal	While cutting coal on a longwall face a mass of stone fell on the deceased from a height of 3 feet and killed him on the spot. Inspection and enquiry made.

34	17th July 10 A M	Charanpur Mine Charanpur P O, Bengal	Apcar Collieries, Ltd	Gohpi Turi (m), 30 *Timber-coolie*	Coal	While deceased was sounding the roof in a depillaring area, a mass of coal 4 × 5′ × 1 thick fell from between two concealed cleats at a height of 14 feet He was struck and killed instantly Inspection and enquiry made
35	25th July 3-30 P M	Patmohna Mine Sitarampur P O Bengal	North Damuda Coal Co Ltd	(1) Balai Manjhi (m) 8 *Coal-cutter* (2) Bhutoo Singh (m) 28, *Driller*	Coal	The deceased were killed by a mass of coal 1 × 11 and from 1—6″ to 2—6 thick which fell without warning from two concealed slips and a parting in the roof at a height of 5 feet Inspection and enquiry made
36	9th August 1-30 P M	Jamadoba Mine Jealgora P O, Bihar	Tata Iron & Steel Co Ltd	Nooneram Manjhi, (m.) 36 *Coal cutter*	Coal	While a miner was engaged in widening out a proposed haulage road 8 feet high a mass of stone 8′ × 3′ × 1—3″, fell from the roof at a point where a fault crossed the gallery He was struck by the falling stone and received injuries which proved fatal shortly afterwards Inspection and enquiry made
7	17th August, 9 P M	Kustore (Alkusa North) Mine Kusunda P O Bihar	Raneegunga Coal Association Ltd	Budri Koiri, (m), 30 *Loader*	Coal	While a loader was at work in a gallery 12 feet high in which roof coal has been taken down prior to the extraction of a pillar a mass of stone 9 × 5 × 1—6, fell from the roof and killed him instantly If supports had been set along a fault which passed through the gallery the accident would have been avoided Inspection and inquiry made
38	21th August, 1 A M	Poriapur Mine Churulia P O Bengal	B Mukherjee & Co	1 Nalinda Muchi (m) 30 2 Joginda Bouri (m) 28 *Coal cutters*	Coal	The deceased left their working place and passed through a fence to rob coal from the edge of a goaf They were killed by a fall of roof in the goaf Inspection and enquiry made
39	[illegible] August, 1 A M	Churulia Mine, Churulia P O, Bengal	Churulia Coal Co Ltd	Dumi Majhian (f) 33 *Coal-carrier*	Coal	While three women were loading coal in a gallery, 9 ft high a mass of coal and shale, 14 × 6 × 9, fell from the roof One of the women was killed instantly and two others were seriously injured Inspection and enquiry made
	August M	Standard (Benahir Section) Mine, Jharia P O, Bihar	Standard Coal Co, Ltd	Mahabir Bhuia, (m) 30 *Loader*	Coal	Deceased was loading coal that had been blasted from the roof of a gallery 2 feet high, when a mass of roof coal 2 × 2 × 1—6, fell on him from between two concealed cleavage planes He sustained serious injuries which proved fatal five hours later Inspection and enquiry made
	[illegible]	Chatrasi Kendustari Mine Hazaribagh P O Bihar	Kaloo Ram Modi	1 Latoo Gope, (m) 12 2 Mahadeo Singh, (m), 15 *Drillers*	Mica	While at work in a drive the deceased were struck and killed instantly by a mass of earth and stone which fell from the roof at a height of about 6 feet Inspection and inquiry made

48	13th October 7.30 P M	Victoria Mine, Kulti P O, Bengal	The New Beerbhoom Co, Ltd	Jalu Manjhi, (m), 40 *Coal cutter*	Coal	While deceased was engaged in a depillaring area in a seam 7 feet thick a mass of roof stone 6 × 4 × 6", dislodged some supports and fell on him He was killed instantly. Inspection and enquiry made
49	19th October, 11.0 P M	Lodna Mine Jharia P O, Bihar	Lodna Colliery Co, (1920), Ltd.	Jangleo Nonia (m) 46 *Loader*	Coal	While loading coal in a depillaring area, deceased was killed instantly by a fall of roof 9 × 4 × 6" which fell unexpectedly from a height of 26 feet Inspection and enquiry made
50	20th October, 9 A M	Ledo (New West) Mine, Margherita P. O, Assam	The Assam Railways and Trading Co, Ltd	Lal Bahadur, Newar (m) 26 *Coal cutter.*	Coal	While engaged in dressing the roof preparatory to setting timber on a new siding deceased was fatally injured by a mass of coal, 4 × 2 × 1 — 1 which fell from the roof at a height of 7 feet Inspection and enquiry made
51	20th October, 9-45 P M	Kustore Mine Kusunda P O Bihar	Ranegunge Coal Association Ltd	Gurn Charan Singh, (m), 36 *Propping-mistry* Sital Singh, (m) 32 *Propping-coolie.*	Coal	While props were being withdrawn in a depillaring area a mass of roof stone 40 × 10 × 3 — 6, fell from a height of 12 feet killing the deceased instantly Inspection and enquiry made
52	23rd October, 7 P M	Dhobani Mine, Ghatsila P O Bihar	Indian Copper Corporation Ltd	Jewar Sahoo (m) 23 *Blasts helper.* P Mayandi, (m) 45 *Loader*	Copper	While the deceased were engaged in charging shot holes in a stope a mass of stone 1.. × 12 × 4, fell on them from between two concealed slips in the hanging wall at a height of 6 feet They were killed instantly Inspection and enquiry made
53	8th November, 6 P M	South Samla Mine, Pandaveswar P. O, Bengal	South Samla Colliery Co	Baro Lakhai Manjhi (m) about 30, *Coal cutter*	Coal	Deceased was killed instantly, in a working gallery when a mass of roof coal weighing approximately 73 tons fell from a height of 10 feet Inspection and enquiry made
54	12th November 4 P M	New Sindih Mine, Katrasgarh P O, Bihar	N K Nag (Receiver)	1 Bidesha Mahali (m), 35 2 Panchu Mahali (m), 36, *Coal cutters*	Coal	The deceased entered a fenced off goaf to load loose coal and were killed instantly by a mass of shale measuring about 70 × 26 × 1 — 6 which fell from the roof at a height of 4 ft Inspection and enquiry made
55	19th November 4-45 A M	Charanpur Mine Charanpur P O, Bengal	Apcar Collieries Ltd	Birbal Kole 40 *Coal cutter*	Coal	While a coal cutter was engaged in loading coal in a depillaring area a large stone fell from inside the goaf and dislodged three props in the working place He was struck by one of the props and sustained injuries which proved fatal Inspection and enquiry made
6	21st November 1 A M	No 3 North Gambrala Mine Dandot P O Punjab	The Executors of the estate of Lala Lala Shanker Dass	Khan (m) 38, *Coal cutter*	Coal	While working in a place from where supports had been withdrawn deceased was killed by a mass of stone which fell from the roof at a height of 3 feet Inspection and enquiry made

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age and occupation of persons killed.	Name of mineral worked.	Cause of accident and remarks.
			FALLS OF ROOF AND SIDES—*contd.*			
			(*a*) Falls of roof—*concld.*			
57	26th November, 11-30 A. M.	Damna Mine, Bamanwara P. O., Central Provinces.	Kanhan Valley Coal Co., Ld.	Shivbhajan, (*m.*), 32. *Coal-cutter.*	Coal .	While dressing coal from the side of a pillar after blasting, a miner was struck and fatally injured by a mass of coal, 1′—6″ × 1′ × 1′, which fell from the roof at a height of 11 feet. Inspection and enquiry made
58	9th December, 4 A. M.	Sendra Mine, Bansjora P. O., Bihar.	Sendra Coal Co., Ld.	Banku Bauri, (*m.*) 28, *Coal-carrier.*	Coal	While engaged in carrying coal from his working place deceased was struck and killed instantly by a fall of roof, about 35′ × 5′ × 3′, which suddenly became dislodged from between to "slips" at a height of 7 feet. Inspection and enquiry made.
59	15th December, 4-30 P. M.	Kajora Mine, Kajoragram P. O., Bengal.	K. C. Pal Choudhury & Brothers.	Mangar Turi, (*m.*). 27. *Loader.*	Coal	In a depillaring section, deceased was filling his basket with the coal obtained from blasting a "stook", when a piece of roof coal, about 3′ × 2′ × 1′ thick, fell on him from a height of 18 feet. He was killed instantly. Inspection and enquiry made.
60	24th December, 9-30 P.M.	Sitalpur Mine, Sitarampur P.O., Bengal.	Bengal Coal Co., Ltd.	Babulal Passi, (*m.*), 37, *Coal-cutter.*	Coal .	Deceased left his working place and entered a fenced off area to rob loose coal from the sides of some pillars. He was struck by a mass of roof-stone, about 9′ × 4′ × 1′ thick, which fell from a height of 8 feet. He sustained serious injuries to which he succumbed 5 hours later. Inspection and enquiry made
61	28th December, 10 A.M.	Balaghat Mine, Bharweli. P.O., Central Provinces.	The Central Provinces Manganese Ore Co., Ltd.	Hari, (*m.*). 29, *Roof dresser.*	Manganese ore.	Deceased was dislodging some loose roofstone in a stope when he slipped and a mass of roof, 3′ × 3′ × 1′—6″, fell on him from a height of 8 feet. He was killed instantly.
62	31st December, 6-45 P.M.	Ledna Mine, Jharia P.O., Bihar.	Ledna Colliery Co. (1920), Ltd.	Bandhu Bhuia. (*m.*), 26, *Loader.*	Coal .	While deceased was loading coal on a haulage road, a mass of coal, measuring about 14′ × 5′—6″ × 6′—6″, suddenly became dislodged from between two "slips" in the roof at a height of 6 feet. He was struck by the edge of the fall and killed instantly. Inspection and enquiry made.

(b) Falls of Sides—(70 deaths)

63	6th January, 11 P M	Tawa Valley Mine, Ghoradongri P O Central Provinces	Walji Bhimji & Sons	(1) Sarum Mehra, (m), 25 (2) Gakru Mehra, (m) 23, (3) Bondar Mehra (m) 22, *Stone cutters*	Coal	While the floor of a new incline cutting was being cut down to the coal seam a mass of sandstone 30' × 10' and from 1' to 4' thick, fell from the side at a height of 20 feet The deceased were buried and killed instantly The fall exposed a concealed slip in the side Inspection and enquiry made
64	10th January, 5 A M	Barareo Mine Jealgora P O, Bihar	East Indian Coal Co, Ltd	Gangat Chamar (m), 24, *Loader*	Coal	While engaged in carrying coal to the loading line a loader was struck and fatally injured by a mass of coal, 8' × 2'—6" × 2', which fell from the side of a pillar at a height of 23 feet Inspection and enquiry made
65	21st January 4 P M	Sodi Mine, Sitarampur P O, Bengal	Messrs Morarji Mulraj & Co	Chota Samlhu Kora (m) 26, *Coal cutter*	Coal	A miner left his working place entered a disused gallery and began to cut coal beneath a stone band A portion of the band about 5' × 2' 6" × 2' × 1" thick, broke away from a height of 1½ feet and partially buried him He sustained internal injuries and expired within an hour Inspection and enquiry made
66	4th February, 10 A M	Bhulanbarareo Mine, Jatharidih P O, Bihar	Bhulanbarareo Coal Co, Ltd	Rau Sahar Mahato (m) 37, *Timber-coolie*	Coal	Following depillaring operations deceased with another person was carrying props that were being withdrawn from a working place when a mass of Coal, weighing about 8 tons suddenly fell from the side of an adjoining pillar Deceased was buried under the fall and killed while his companion received serious injuries Inspection and enquiry made
67	18th February, 4-30 P M	Kurhari area Mine, Giridih P O, Bihar	Govt of India State Railway Coal Department.	Raghunath Bhoona, (m) *Coal-cutter*	Coal	While the extraction of a pillar was proceeding a mass of stone band and coal 4' × 1'—6" × 6" rolled against a prop holding and dislodged it The prop struck deceased who was sitting about 1½ feet away and killed him on the spot Inspection and enquiry made
68	4th February 8-30 P M	Salaya Jaharhai Mine, Mogra P O, Central Provinces	Dyer & Stone Lime Co Ltd	Bharat (m) 20 Ram Ratia (m) 30 Jawahar (m) 24 Sukh Deo, (m) 25 Hirdan (m) 50 Ram Nath (m) 40 Umrao (m) 20 Mst Mulia, (f) 20 Mst Chaiti (f) 19 *Labourers*	Limestone	A large portion of the limestone and overburden of a side of an open quarry unexpectedly collapsed and killed nine persons—seven men and two women Inspection and enquiry made

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age and occupation of persons killed.	Name of mineral worked.	Cause of accident and remarks.
			FALLS OF ROOF AND SIDES—*contd.*			
			(*a*) Falls of roof—*concld.*			
57	26th November, 11-30 A. M.	Damua Mine, Bamanwara P. O., Central Provinces.	Kanhan Valley Coal Co., Ld.	Shivbhajan, (*m.*), 32. *Coal-cutter.*	Coal	While dressing coal from the side of a pillar after blasting, a miner was struck and fatally injured by a mass of coal, 1′—6″ × 1′ × 1′, which fell from the roof at a height of 11 feet. Inspection and enquiry made
58	9th December, 4 A. M.	Sendra Mine, Bansjora P. O., Bihar.	Sendra Coal Co., Ld.	Banku Bauri, (*m.*) 28. *Coal-carrier.*	Coal	While engaged in carrying coal from his working place deceased was struck and killed instantly by a fall of roof, about 35′ × 5′ × 3′, which suddenly became dislodged from between to "slips" at a height of 7 feet. Inspection and enquiry made.
59	15th December, 4-30 P. M.	Kajora Mine, Kajoragram P. O., Bengal.	K. C. Pal Choudhury & Brothers.	Mangar Turi, (*m.*). 27. *Loader.*	Coal	In a depillaring section, deceased was filling his basket with the coal obtained from blasting a "stook", when a piece of roof coal, about 3′ × 2′ × 1′ thick, fell on him from a height of 18 feet. He was killed instantly. Inspection and enquiry made.
60	24th December 9-30 P.M.	Sitalpur Mine, Sitarampur P.O., Bengal.	Bengal Coal Co, Ltd.	Babulal Passi, (*m.*), 37, *Coal-cutter.*	Coal	Deceased left his working place and entered a fenced off area to rob loose coal from the sides of some pillars. He was struck by a mass of roof-stone, about 9′ × 4′ × 1′ thick, which fell from a height of 8 feet. He sustained serious injuries to which he succumbed 5 hours later. Inspection and enquiry made
61	28th December, 10 A.M.	Balaghat Mine, Bharweli P.O., Central Provinces.	The Central Provinces Manganese Ore Co., Ltd.	Hari, (*m.*). 29. *Roof dresser.*	Manganese ore.	Deceased was dislodging some loose roofstone in a stope when he slipped and a mass of roof, 3′ × 3′ × 1′—6″, fell on him from a height of 8 feet. He was killed instantly.
62	31st December, 6-45 P.M.	Lodna Mine, Jharia P.O., Bihar.	Lodna Colliery Co. (1920), Ltd.	Bandhu Bhuia. (*m.*), 26, *Loader.*	Coal	While deceased was loading coal on a haulage road, a mass of coal, measuring about 14′ × 5′—6″ × 6′—6″, suddenly became dislodged from between two "slips" in the roof at a height of 6 feet. He was struck by the edge of the fall and killed instantly. Inspection and enquiry made.

(b) Falls of Sides—(70 deaths).

63	6th January, 11 P M	Tawa Valley Mine, Ghoradongri P O, Central Provinces	Walji Bhimji & Sons	(1) Sarum Mehra (m), 25 (2) Gakru Mehra, (m), 23, (3) Bondar Mehra (m), 22, *Stone cutters*	Coal	While the floor of a new incline cutting was being cut down to the coal seam a mass of sandstone, 30 × 10 and from 1' to 4' thick, fell from the side at a height of 20 feet The deceased were buried and killed instantly The fall exposed a concealed "slip" in the side Inspection and enquiry made
64	16th January, 5 A M	Bararee Mine, Jealgora P O, Bihar	East Indian Coal Co, Ltd.	Ganpat Chamar, (m), 24, *Loader*	Coal	While engaged in carrying coal to the loading line a loader was struck and fatally injured by a mass of coal, 8' × 2—6' × 2', which fell from the side of a pillar at a height of 23 feet. Inspection and enquiry made
65	21st January, 4 P M	Sudi Mine, Sitarampur P O, Bengal	Messrs Morarji Mulraj & Co	Ghota Sambhu Kora, (m) 26, *Coal cutter.*	Coal	A miner left his working place entered a disused gallery and began to cut coal beneath a stone band A portion of the band, about 5 × 2 6' × 2' × 1' thick, broke away from a height of 1½ feet and partially buried him He sustained internal injuries and expired within an hour Inspection and enquiry made
66	4th February, 10 A M	Bhulanbaree Mine, Pathardih P O, Bihar	Bhulanbaree Coal Co, Ltd	Ram Sahay Mahato (m) 37, *Timber coolie.*	Coal	Following depillaring operations, deceased with another person was carrying props that were being withdrawn from a working place when a mass of Coal, weighing about 8 tons suddenly fell from the side of an adjoining pillar Deceased was buried under the fall and killed, while his companion received serious injuries Inspection and enquiry made
67	18th February, 4-30 P M	Kurhurbaree Mine, Giridih P O, Bihar	Govt of India State Railway Coal Department.	Raghunath Dhoon, (m) [illegible] *Coal-cutter*	Coal	While the extraction of a pillar was proceeding a mass of strong band and coal 1' × 1 6' × 6', rolled against a prop holding and dislodged it The prop struck deceased who was sitting about 1 feet away and killed him on the spot Inspection and enquiry made
68	26th February, 3-30 P M	Silaiya Pabarhai Mine, Mogaon P O, Central Provinces	Dyer & Stone Lime Co Ltd	Bharat (m) 20 Ram Ratia (m) 30 Jawahar (m) 24 Sukh Deo, (m) 25, Hirdan (m), 50 Ram Nath (m), 40, Umrao, (m) 22, Mat Mulia, (f) 20, Mat Chaiti, (f), 19, *Labourers*	Limestone	A large portion of the limestone and overburden of a side of an open quarry unexpectedly collapsed and killed nine persons—seven men and two women Inspection and enquiry made

76	6th April 11 P M	Jogta Mine S j a P O, Bihar	Messrs Agabeg Brothers Ltd	Chelie Beldar, (m) 22 *Loader*	Coal	Deceased was filling a tub of coal when a mass of coal amounting to several tons fell from the side of a pillar and killed him instantly Inspection and enquiry made
77	11th April 3 P M	Talchari Mines Talchari P O, Bihar	I S Samanto	Duran Chamar, (m) 30 *Quarry man*	Stone	While deceased was attempting to lever down a boulder 6 × 3 × 1—6 from the side of a quarry 27 feet deep, it suddenly became dislodged and struck him He received injuries which proved fatal 7 hours later A concealed slip on the side was the cause of the fall Inspection and enquiry made
78	15th April 6 15 A M	Bhowra Mines, Jealgora P O, Bihar	The Eastern Coal Co, Ltd	Lakhiram Rajwar, (m) 18, *Coal cutter*	Coal	While a gang of miners and loaders was removing loose coal from a fenced off area in a large quarry, a mass of overburden weighing about 10 cwts fell from the face at a height of about 50 feet Deceased was struck and killed instantly and a female loader was seriously injured Inspection and enquiry made
79	22nd April 1 P M	Jodna Mines, Jharia P O, Bihar	Jodna Colliery Co (1920) Ltd	Gullo Dusadh, (m) 42 *Coal cutter*	Coal	While the loading of coal blasted from the side of a pillar under extraction, was about to be commenced a mass of coal measuring about 3 1—6 × 9"1 fell from the side at a height of 30 feet on to deceased He was killed instantly. Inspection and enquiry made
80	24th April 11 15 A M	Siwang Mine Hazaribagh P O, Bihar	E I & B N Railways	Rajbar Gond, (m) 40 *Coal cutter*	Coal	While a gang of workers was at work on the slope of a quarry digging at 1 in 1 7 where extraction of coal was proceeding from slip to rise a portion of the side measuring 75 × 10 × 1 slipped Deceased was buried and suffocated and two other miners received serious injuries Inspection and enquiry made
81	3rd May 1 1 M	Purnajor Mine Jamtara P O Bihar	B Mookerjee & Co	Mangal Manjhi (m) 31, *Coal cutter*	Coal	While miners were engaged in extracting a 'stook' of coal there were indications of a fall of weight in their working place and they all withdrew One of them returned to recover his tools, and was killed instantly by a mass of coal 1 × 1 × 1 which fell from the side at a height of 9 feet Had the overhanging coal been taken down before the miners were allowed to cut coal the accident would not have occurred Inspection and enquiry made
	y, M	Kusture Mine Kusunda P O, Bihar	Jamadoba Coal Association Ltd	Charta Bahiriae (m) 35 *Loader*	Coal	A mass of coal weighing about 10 cwt, fell off a slip in the corner of a pillar on to deceased as he was passing with a basket of coal He was killed instantly Inspection and enquiry made
	ay M	Ghorawari Mine Jhunnor P O Central Provinces	Hirdagarh Collieries Ltd	Uj Kathia (f) 30 *Labourer*	Coal	A gang of workers was resting in a newly made quarry, 6 feet deep when a mass of side weighing about 7 cwt, fell on deceased She sustained serious injuries to which she succumbed 13 days later Inspection and enquiry made

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age and occupation of persons killed	Name of mineral worked.	Cause of accident and remarks
			FALLS OF ROOF AND SIDES—*contd*			
			(*b*) Falls of sides—*contd.*			
69	27th February, 3-30 A.M.	Saltore Mine, Dishergarh P. O., Bengal.	Burrakur Coal Co., Ltd.	Kurn Mrab, (m.), 25, *Coal cutter.*	Coal	Deceased was setting up a gallery adjoining a depillaring area. A mass of coal suddenly fell from the corner of a pillar dislodging three props one of which struck him and killed him instantly. Inspection and enquiry made.
70	2nd March, 5-30 P.M.	South Kujama Mine, Jharia P.O., Bihar.	Bagdigi Kujama Collieries Co.	Antu Rajwar, (m.), 32, *Coal-cutter.*	Coal	Contrary to orders deceased undercut the side of a pillar which he was dressing along with others preparatory to depillaring when a mass of coal, about 6' × 6' × 1'—6" fell on him. He was killed instantly. Inspection and enquiry made.
71	3rd March, 9 A.M.	Pattabhirama Mine, Sydapuram P.O., Madras.	S. K. Neelakanteswarama	Kondlapadi Subladu, (m.), 24, *Driller.*	Mica	While engaged in dressing down overburden in a quarry, three drillers brought about a fall of rock measuring 12' × 9' × 6', and fell along with it. Deceased was buried and suffocated. The others sustained serious injuries. Inspection and enquiry made.
72	12th March, 7-30 P.M.	Jharia Khas Mine, Jharia P. O., Bihar.	The Standard Coal Co., Ltd.	Kesho Muchi, (m.), 27, *Coal-cutter.*	Coal	While drilling a shot hole deceased was seriously injured by a piece of stone which slid down from an old goaf. He succumbed to his injuries 7 days later. Inspection and enquiry made.
73	15th March, 2 P.M.	Gulla Hulki Mine, Katangjherri P. O., Central Provinces.	Messrs. Chenilram Jesraj	Jagao Ponso, (m.), 45, *Labourer.*	Manganese Ore	Deceased was buried by a fall of loose earth, weighing about 1 ton in a bordering pit. He was dead when extricated.
74	15th March, 4 P.M.	Hindubagh Mine, Hindubagh P. O., Baluchistan.	The Baluchistan Chrome Co., Ltd.	Sultan, (m.), 27, *Labourer.*	Chromite	While deceased was working in a tunnel, a mass of stone 10' × 6' × 2' fell on him from the side from a height of about 2 ft. and suffocated him. Inspection and enquiry made.
75	30th March, 10-15 P.M.	Kustore Mine, Kusunda P. O., Bihar.	Raneegunge Coal Association Ltd	Chandmoni Mahulin, (f.), 25, *Coal-carrier.*	Coal	While engaged in carrying coal from a working place deceased was struck by a mass of coal, 5' × 4' × 2' which fell from the side of a pillar at a height of 12 feet. She sustained serious injuries to which she succumbed two hours later. Inspection and enquiry made.

76	6th April 11 P M	Jogta Mines Sijua P O, Bihar	Messrs. Agabeg Brothers Ltd	Chedie Beldar, (m) 22 *Loader*	Coal	Deceased was filling a tub of coal when a mass of coal amounting to several tons *fell from the* side of a pillar and killed him instantly Inspection and enquiry made
77	11th April 3 P M	Taljhari Mines Taljhari P O, Bihar	T S Samanto	Piran Chamar (m) 30 *Quarry man*	Stone	While deceased was attempting to lever down a boulder 6 × 3 × 1 — 6 from the side of a quarry, 27 feet deep, it suddenly became dislodged and struck him He received injuries which proved fatal 7 hours later A concealed slip on the side was the cause of the fall Inspection and enquiry made
78	12th April [illegible]	Bhowra Mines, Jealgora P O, Bihar	The Eastern Coal Co Ltd	Lakhiram Lajwar (m) 18 *Coal cutter*	Coal	While a gang of miners and loaders was removing loose coal from a fenced off area in a large quarry a mass of overburden weighing about 10 cwts fell from the face at a height of about 80 feet Deceased was struck and killed instantly and a female loader was seriously injured Inspection and enquiry made
[illegible]	[illegible]	[illegible] Mines, [illegible] P O, Bihar	Jodna Colliery Co (1920), Ltd	Chillo Dusadh (m) 42 *Coal cutter*	Coal	While the loading of coal blasted from the side of a pillar under extraction was about to be commenced a mass of coal measuring about 3 1 — 6 × 9 , fell from the side at a height of 25 feet on to deceased He was killed instantly Inspection and enquiry made
[illegible]	[illegible]	[illegible]	[illegible] Ltd [illegible]	Ramlhar Gond, (m) 41 *Coal cutter*	Coal	While a gang of workers was at work on the slope of a quarry dipping at 1 in 1 where extraction of coal was proceeding from dip to rise a portion of the side measuring 25 × 10 × 1 slipped Deceased was buried and suffocated and two other miners received serious injuries Inspection and enquiry made
[illegible]	[illegible]	[illegible]	[illegible]	[illegible] Marjhi, [illegible]	Coal	While miners were engaged in extracting a stook of coal there were indications of roof weight in their working place and they all withdrew One of them returned to recover his tools and was killed instantly by a mass of coal 3 × 1 × 1 which fell from the side at a height of 9 feet Had the overhanging coal been taken down before the miners were allowed to cut coal the accident would not have occurred Inspection and enquiry made
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Coal	A mass of coal weighing about 10 cwt, fell off a slip in the side of a pillar on to deceased as he was passing with a basket of coal He was killed instantly Inspection and enquiry made
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible] in a newly made quarry, [illegible] mass of stone weighing about 7 cwt, [illegible] sustained injuries to which [illegible] Inspection and enquiry

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age and occupation of persons killed.	Name of mineral worked.	Cause of accident and remarks.
			FALLS OF ROOF AND SIDES—*contd.*			
			(*b*) Falls of sides—*contd.*			
84	21st May, 4-30 P.M.	Central Jharia Mine, Jharia P. O., Bihar.	Central Jharia Colliery Co.	Sreenath Mahata, (*m.*), 29, *Earth-cutter.*	Coal	While engaged in the removal of overburden in a quarry an earth-cutter was buried by a mass of earth, 24′ × 10′ × 3′, which fell from the side. He died from suffocation before he could be released. If the side had been properly stepped or sloped the accident would not have occurred. Inspection and enquiry made.
85	3rd June, 7 P. M.	Bejdih Mine, Sitarampur P. O., Bengal.	Equitable Coal Co., Ld.	Chand Moni Mejhau, (*f.*), 36, *Loader.*	Coal	While a loader was filling her basket with coal obtained from the floor of a dip gallery, some 10 tons of coal fell without warning from the side of a pillar at a height of 12 feet. She was buried by the fall and killed instantly. The fall exposed a slip. Inspection and enquiry made.
86	10th June, 1 A. M.	Karari Mica Mine, Jhajha P. O., Bihar.	K. K. Basu	Mangar Meah, (*m.*), 38, *Daily labourer.*	Mica.	Deceased with others was working in an underground gallery when a fall of side took place. He was caught by the fall and sustained fatal injuries.
87	18th June, 4 P. M.	Gararia Mine, Bansjora P. O., Bihar.	Messrs. Baijnath Jugalkishore.	Motka Pashi, (*m.*), 40, *Coal-cutter.*	Coal.	While the extraction of a pillar was proceeding in a seam 28′ thick, a miner was struck and fatally injured by a mass of coal which fell on him from the side. Inspection and enquiry made.
88	23rd June, 4-30 P. M.	Lodna Mine, Jharia P. O., Bihar.	The Lodna Colliery Co. (1920), Ltd.	Dasu Pasi, (*m.*), 43, *Loader.*	Coal.	While coal was being loaded from a depillaring area in a seam 22 feet thick, a mass of coal 35′ × 18′ × 3′-6″, fell from a pillar at the side of the loading line. Deceased was killed instantly. Inspection and enquiry made.
89	29th June, 4-30 A. M.	Kurhurbaree Mine, Giridih P. O., Bihar.	Government of India State Railway Coal Department.	Babu Lall Chamar, (*m.*), 24, *Coal-cutter.*	Coal.	While deceased was filling a basket with coal in a gallery driven through a pillar preparatory to depillaring, a "bump" occurred in the goaf causing a mass of coal, weighing about 5 to 6 cwt. to fall from the side. Deceased was caught by the fall and fatally injured. Inspection and enquiry made.

90	24th July 5 30 P M	Jamadoba Mine, Jealgora P O, Bihar	The Tata Iron & Steel Co, Ld	Jharn Dass (m) 34 *Coal-cutter*	Coal	While a miner was standing on a ladder levering down side coal after blasting, he overbalanced and fell down the ladder Before he could recover himself a mass of coal fell from the side from a height of about 5 feet and inflicted injuries which proved fatal five hours later Inspection and enquiry made
91	26th July 2 P M	Kargali mine Bokaro P O Bihar	State Railways Coal Department	Fulbanthi (f) 30, *Loader*	Coal	Deceased was killed in an open working by a piece of stone, 1—6 × 8 × 6 which fell from the side at a height of about 90 feet. Inspection and inquiry made
92	6th August 1 P M	Dhariajoba Mine Kusunda P O, Bihar	Dhariajoba Colliery Co Ltd	Sital Pashi (m) 3_ *Coal-cutter*	Coal	While a miner was engaged in removing floor coal in a gallery 14 ft wide and 25 ft high in the immediate vicinity of a depillaring area some small pieces of coal fell from the side at a height of about 10 ft He was seriously injured and died 3 months later Inspection and enquiry made
93	11th August 5 30 P M	Mikuapahari Mine Jhumri Telaiya P O, Bihar	Chatturam Darsuram	Budhan Meah (m) 21, *Dump picking coolie*	Mica	Deceased went into an abandoned excavation to recover his pick and while there was buried by a mass of earth 1_ × 6 × 3 thick which fell from the side at a height of 13 feet He was dead when extricated Inspection and enquiry made
94	13th August 12 NOON	Mudidih Mine Sijua P O, Bihar	Burrakur Coal Co, Ltd	Rahan Bhuiya (m) 32 *Loader*	Coal	While a miner was dressing the side of a pillar in a depillaring area he dislodged a mass of coal from a height of 18 feet Deceased who was attending about 10 feet away from the pillar showing a light for the miner was struck by a piece of coal 2 × _' × 1—6" and fatally injured Inspection and enquiry made
95	21 August, 7 40 A M	Pandedih Mine Sijua P O, Bihar	S N Daw & Co	Anand Ram Bilaspuri (m) 31, *Coal-cutter*	Coal	Deceased was killed by a fall of a mass of earth from the side of a quarry at a height of 7—6" Inspection and inquiry made
96	22nd August 2 30 P M	Pretoria Mine Charanpur P O, Bengal	Seebpur Coal Co Ltd	Behari Lodh (m) 26 *Coal cutter*	Coal	While deceased was dressing down side coal loosened by blasting his crowbar slipped and he fell on the floor A mass of about 7 cwt of coal fell from a height of 8 feet and struck him He sustained serious injuries to which he succumbed 3 hours later Inspection and inquiry made
97	26th August 12 30 P M	Kusstore (Burragarh Section) Mine Kusunda P O Bihar	Raneegunge Coal Association Ltd	Hasu Banri (m) 25 *Coal cutter*	Coal	During the extraction of a pillar in a seam 7—6" thick a miner was undercutting when a mass of coal weighing about 10 cwt fell off a pronounced cleav go plane and a slip which was at right angle to it and he sustained fatal injuries Inspection and inquiry made
98	8th September 1 30 P M	West Jamuria Mine, Charanpur P O, Bengal	West Jamuria Coal Co Ltd	Madho Mean (m) 38, *Loader*	Coal	While loading coal in a depillaring area a loader was struck by a mass of coal about 80 lbs in weight which fell unexpectedly from the side of a stook He sustained injuries which proved fatal eleven days later Inspection and enquiry made

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine	Name of owner	Name, sex, age and occupation of persons killed.	Name of mineral worked	Cause of accident and remarks
		FALLS OF ROOF AND SIDES—*contd.*				
		(*b*) Falls of sides.—*contd.*				
[illegible]	10th September 1937.	East Jambad Mine, Angoragram P. O., Bengal.	East Jambad Coal Concern	Dhanga Manjhi (male, 17, Collier)	Coal	While engaged in cutting the side of a pillar, a miner was struck by a mass of coal, 8′ × 5 × 1′–6″, which fell from the side. He was killed instantly. Inspection and enquiry made.
[illegible]	14th September 1937.	Mohra Mine, Kedarma P. O., Bihar	S. K. Sahaha and Sons	Bihari Gope, male, 35, Miner	Mica	While working in an open excavation, 6 feet deep, a miner was partially buried by a fall of side, 3′ × 2′ × 2′ thick, which fell on him from a height of 3 feet. He sustained serious internal injuries and died thirteen days later. Had the sides of the excavation been properly sloped or stepped the accident would have been avoided. Inspection and enquiry made.
101	[illegible]	Shanda Mine, Lopodih P. O., Bihar	Messrs. Mohatta Brothers	Lakan Ranchi, male, 30, Miner	Coal	While two miners were robbing coal from the side of a tramming level, a mass of coal, weighing about 2 tons, was released unexpectedly and fell from a height of 7 feet. One of them was killed instantly and the other received serious injuries. Inspection and enquiry made.
102	[illegible]	Dhanbad West Mine, Dhanbad, P. O., Bengal	[illegible] Coal Co., Ltd.	Bhadari Sandeh, male, [illegible], Collier	Coal	While a miner was at work in a dead-working area he was struck by a piece of coal which burst from the side of a pillar. He was fatally injured. Inspection and enquiry made.
[illegible]	[illegible]	[illegible]	[illegible]	Babua Lal Pasi, male, 10, Collier	Coal	Deceased, a trammer, entered working place and was engaged in loading coal on a gallery when a mass of coal, 10′ × 10 × 2′, fell upon him from a concealed slip in the side. He was fatally injured. Inspection and enquiry made.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Coal	While a trammer was drawing from the side of a loading level to the vicinity of a depot, a mass of coal, 5′ × 2′ × [illegible], burst off the side and fell on his right [illegible]. He sustained fatal injuries [illegible]. Inspection and [illegible]

105	21st October, 8 45 P M	Alkusa North Mine Kusunda P O, Bihar	The Bonsegunge Coal Association Ltd	Basu Manjhi (m), 32 *Loader*	Coal	A gang of miners and loaders went into a gallery which was fenced off because the side was dangerous due to the presence of a small fault They robbed the side and corner of a pillar and while they were loading a mass of coal 5 × 5 × 1 — 2 fell off the fault killing one of the loaders instantly Inspection and enquiry made
106	22nd October 12-50 P M	Katras Chotolah Mine Katrasgarh P O, Bihar	Burrakur Coal Co, Ltd	Dharam Malla (m) 35, *Coal-cutter*	Coal	While extracting a stock of coal 5 feet high, that was left to support a prop in a gallery a miner was struck by a mass of coal 3 × 2 × 2', which had dislodged from the stock, and received serious injuries to which he succumbed a few hours later Inspection and enquiry made
107	22nd October 1 0 P M	Serampur Mine Giridih P O, Bihar	The Government of India	Bandhu Musa (m) 30 *Coal cutter*	Coal	In a roadway 10 ft high a miner was standing on a ladder dressing the side near the roof with a crowbar He overbalanced and fell off the ladder and a block of stone 1 — 6 × 1' × 9, which he had been dressing, fell on his left leg, causing injuries which proved fatal four days later Inspection and enquiry made
108	26th October, 2 P M	Bararee Mine Jealgora P O Bihar	The East Indian Coal Co Ltd	Lutu Rai (m) 40 *Coal-cutter*	Coal	While a miner was engaged in cutting a recess in the side of a pillar at the site of a fire stopping a mass of coal weighing about 2 tons fell from the side He sustained fatal injuries Inspection and enquiry made
109	29th October, 2 P M	Jamuria Mine, Charanpur P O Bengal	Equitable Coal Co, Ltd	Lodai Manjhi (m) 30 *Stone-dresser*	Coal	A stone dresser was struck and fatally injured when a small piece of stone fell unexpectedly from the corner of a pillar from a height of 6½ feet Inspection and enquiry made
110	1st November, 3 A M	Dhemo Main Mine Sitaranpur P O, Bengal	Dhemo Main Coal Co, Ltd	Padam Bahadur (m) 30 *Coal cutter*	Coal	While deceased was carrying a basket of coal a mass of coal, 9 × 5 × 1 — 6 fell on him from a concealed 'slip' in the corner of a pillar at a height of 15 feet He sustained injuries from which he died seven hours later Inspection and enquiry made
1	4th November 5-0 P M	Kendwadih Mine Kusunda P O Bihar	The East Indian Coal Co Ltd	Bhondu Rajhowar (m) 25 *Loader*	Coal	While a loader was pushing an empty tub along a level road a mass of coal weighing about 3 cwt fell from the side from a height of 10 feet He was killed instantly Inspection and enquiry made
12	4th November, 5-30 P M	Dharmjoba Mine Kusunda P O Bihar	Dharmjoba Colliery Co Ltd	Narayan Chamar (m) 30 *C I Miner*	Coal	While deceased was resting near the side of a pillar, a piece of coal 2 × 1 × 9", fell from the side at a height of 20 feet and struck him He sustained serious injuries and died 30 hours later Inspection and enquiry made
3	10th November 10 30 A M	Victoria West Mine Dishergarh P O Bengal	The New Beerbhoom Coal Co Ltd	Satchitanand Lall (m) 44 *Mining Sardar*	Coal	Deceased was dressing loose coal from the side of a gallery 15 feet high when a piece of coal fell on his foot inflicting serious injuries Pneumonia supervened and he died eleven days later Inspection and enquiry made

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age and occupation of persons killed.	Name of mineral worked.	Cause of accident and remarks
				FALLS OF ROOF AND SIDES—*contd.*		
				(*b*) Falls of sides—*concld.*		
114	24th November, 11 A.M.	Jamadoba Mine, Jharia P. O., Bihar	The Tata Iron and Steel Co., Ltd.	Diroga Meah, (*m*), 27, Manglu Meah, (*m*), 28, *Coal carriers.*	Coal	The deceased with others were loading fallen coal from a gallery 12 feet high preparatory to setting supports and commencing dopi'laring operations, when a mass of coal, 15′ × 4′ × 8′ suddenly fell from the side of a pillar. The deceased were killed on the spot and another person sustained serious injuries. It is presumed that "weighting" from an adjoining goaf caused the coal to fall without any warning. Inspection and enquiry made.
115	30th November, 1 P.M.	Lodna Mine, Jharia P. O., Bihar.	Lodna Colliery Co. (1920), Ltd.	Sampat Pashi, (*m.*), 42, *Coal cutter.*	Coal	After blasting, a miner was dressing loose coal from the side of a pillar under extraction by standing on a ladder, when a mass of coal weighing about a ton suddenly fell. He was struck and sustained injuries which proved fatal shortly afterwards. Inspection and enquiry made.
116	14th December, 4 P.M.	Partabpur Mine, Hazaribagh P. O., Bihar	Misrilal Murarka.	Dhram Chamar, (*m*), 30, Dukhi Chamar, (*m*) 20, *Miners.* Somar Kahar, (*m.*), 15, *Domestic servant.*	Mica	The three deceased were killed by a fall of side in an open excavation for mica. Inspection and enquiry made.
117	21st December, 12-10 P.M.	Gua Iron Ore Mine, Gua P. O., Bihar.	The Indian Iron & Steel Co., Ltd.	Bharat, (*m*), 39, *Miner.*	Iron Ore.	Contrary to orders deceased was removing ore from a bench in a quarry when he released a boulder, 4′ × 3′ × 1′—3′ which suddenly turned over and crushed him against the side. He was killed almost immediately. Inspection and enquiry made.
118	24th December, 9 A.M.	Lalki Samsoharia Mine, Jhumri-Telaiya P. O., Bihar.	Chatturam Harsanram.	Budhni Jolahin, (*f.*), 50, *Labourer.*	Mica.	While working in an excavation 4 feet deep made in an old dump, deceased was buried by a fall of loose side. She was dead when extricated. Inspection and enquiry made.

IN SHAFTS (ROPES AND CHAINS BREAKING)—*2 deaths*

119	30th March, 12 Noon	Dohari Mine Jharia P O, Bihar	Keshavji Pitamber, Receiver	Kurda Bauri, (m) 45, *Charge man*	Coal	Deceased was being raised in a cane basket up a sinking shaft 20 feet deep when the steel winding rope ¾" diameter broke and he fell to the bottom of the shaft He sustained serious injuries to which he succumbed five days later Inspection and enquiry made
120	27th May, 5 P M	Ratibati Mine Kalipahari P O, Bengal	Ratibati Collieries Ltd	Nabi Meah (m) 22 *Coal-cutter*	Coal	In a shaft 266 feet deep a cage containing six persons including deceased had been raised about 30 feet above the shaft bottom, when the end links of two bridle chains broke This caused the cage to tilt with the result that deceased fell from the cage to the shaft bottom and sustained injuries to which he succumbed almost immediately Inspection and enquiry made

IN SHAFTS (WHILST ASCENDING OR DESCENDING BY MACHINERY)—*5 deaths*

121	20th August 7 50 A M	Bankamula 7 and 8 Pits Mine Charanpur P O, Bengal	Bengal Coal Co Ltd	(1) Kali Mochi (m), 23 (2) Basudeb Dase (m) 25 (3) Bhonda Pasi (m) 25, *Pumpmen*	Coal	While three pumpmen were ascending a shaft 925 feet deep in a sinking bucket the bow of the bucket broke resulting in the three men being thrown out and falling to the bottom of the shaft—a distance of 210 feet They were killed instantly Expert examination revealed that the fracture of the mild steel bow was due to "corrosive fatigue coupled with shock Inspection and enquiry made
122	28th September 10 P M	Lodna Mine Jharia P O, Bihar	The Lodna Colliery Co (1920), Ltd	Murat Barhi, (m) 50, *Fitter,*	Coal	While ascending a sinking shaft a fitter sat on the rim of a kibble and at a midshaft inset where there was a landing platform he fouled a girder and fell out of the kibble to the bottom of the shaft a distance of 150 feet He was killed instantly Inspection and enquiry made
123	4th October 5 P M	Ghusick Mine Kalipahari P O, Bengal	Gusick Coal Co, Ltd	Kashi Bouri (m) 30 *Onsetter*	Coal	While ascending a shaft 328 feet, deceased fell out of the cage to the bottom of the shaft and was killed instantly Inspection and enquiry made

IN SHAFTS (FALLING DOWN SHAFTS)—*1 death.*

124	30th April, 1-0 A M	Kustore Mine Kusunda P O, Bihar	The Panecgunge Coal Association Ltd	Shamlal Kalar (m) 2.. *Tippler Trolleyman.*	Coal	While deceased was helping to operate a single tub rotary tippler at the top of a staple pit 70 ft deep he slipped and fell through the open platform of the tippler into the shaft He succumbed to his injuries three hours later If sheets or expanded metal had been provided on the platform and sides of the tippler, the accident would have been avoided Inspection and enquiry made

IN SHAFT (MISCELLANEOUS)—(*4 deaths*)

125	17th June 7 30 A M	Methani Mine Sitarampur P O, Bengal	Aldih Coal Co Ld	Barhan Dhobi (m) 29, *Labourer*	Coal	Deceased was standing inside a cage at the top of a shaft receiving rails which were being loaded when a rail, which was handed to him slipped and struck him He sustained serious injuries to which he succumbed seven days later Inspection and enquiry made

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial number	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age and occupation of persons killed.	Name of mineral worked.	Cause of accident and remarks.
			IN SHAFT (MISCELLANEOUS)—(*4 deaths*)—*contd.*			
126	19th June, 5-30 P.M.	Badia Mine, Ghatsila P. O., Bihar.	Indian Copper Corporation, Ld.	Dubraj, (m.), 30, *Trammer.*	Copper .	Deceased with three others was working in a shaft from a cradle suspended from a crab winch. As the cradle was being lowered, the gearings of the winch became accidently disengaged and the cradle despite the brake, descended the shaft through a distance of 165 feet and plunged into water, about 15 feet deep, in the sump. Deceased was dead when recovered. Inspection and enquiry made.
127	30th October., 11 A.M.	Mosaboni Mine Ghatsila P. O., Bihar.	Indian Copper Corporation, Ld.	Abdul Gafur, (m.), 47, *Machine shop Mistry.*	Copper .	While engaged in selecting the sites in an inclined shaft for putting in additional rollers, deceased was accidentally run over by the descending skip and fatally injured. Inspection and enquiry made.
128	23rd November, 3 P.M.	Modern Satgram Mine, Kusunda P. O., Bihar.	Modern Satgram Coal Co., Ld.	Sudan Bauri, (m) 21, *Labourer.*	Coal .	While a column of exhaust and delivery steam pipes was being lowered down a sinking shaft 350 feet deep by means of a crab winch, the hook of the pulley block suddenly broke, allowing the column to fall down the shaft. Deceased, who was watching the lowering operation, was struck by some of the detached pipes and fatally injured. Inspection and enquiry made.
			SUFFOCATION BY GASES—(*2 deaths*).			
129	6th October, 10-30 A.M	Ena Mine, Jharia P. O., Bihar.	North-West Coal Co., Ld.	Mahabir Singh, (m.), 47. Akal Majhi, (m), 35, *Shaft-sinkers.*	Coal .	After firing 7 sumping holes each containing 14 ozs. of gelignite in a sinking shaft, 126 feet deep, the kibble was run up and down for half an hour to clear the smoke. The sinkers then resumed work and worked in the shaft for three hours. They were affected by nitrous oxide fumes, the extreme symptoms developing several hours later. Two of them afterwards died and the others recovered. Inspection and inquiry made.

BY EXPLOSIVES—(*15 deaths*)

130	11th January, 11 P M.	Chandametta Mine, Parasia P O, C P	Pench Valley Coal Co, Ld	Dulley Mehra, (m) 32, *Coal cutter.*	Coal	Deceased left his working place, passed through a fence and entered an area where blasting operations were being carried on He was struck and killed instantly by a piece of coal projected by the shot Inspection and enquiry made
131	9th February, 1 P M	Kalyanpur Lime stone Mine, Banjari P. O, Bihar	Kalyanpur Lime Works, Ld	Dalkeshar Mallah, (m) 28 *Shot firer*	Lime-stone	During blasting operations a piece of stone, 5 x 5 4' was projected and struck deceased on the head and killed him instantly Inspection and enquiry made.
132	3rd March, 7-30 A M	Kathera Stone Mine, Rajahmundry P. O, Madras	A Lakshmanaswamy Naidu	Chella Subbadu, (m) 45 *Stone breaker.*	Stone	During blasting operations deceased, who failed to take shelter, was struck by a piece of rock which was projected by a shot fired at a place, 279 feet distant He sustained injuries to which he succumbed 36 hours later Inspection and enquiry made
133	10th March, 2-30 P M.	Nimod Mine, Kekri P O, Rajputana	Labh Chand & Co.	Hardeo Daroga, (m) 34, *Shot firer.*	Mica	While charging a shot hole a premature explosion of gunpowder took place and fatally injured deceased Inspection and enquiry made
134	25th April, 2 A M	Newton Chickli Mine, Parasia P. O, C P	Newton Chickli Collieries, Ld	Motilal Gauli, (m) 25, *Coal-Cutter.*	Coal	Deceased was assisting his companion in stemming a shot-hole charged with gunpowder when the shot exploded and fatally injured him It is presumed that either of them inadvertantly set fire to the shot from the open lights that were burning closeby Inspection and enquiry made
135	10th May, 12-30 P.M	Wah Mine Wah R S. P O, Punjab	The Associated Cement Co, Ld	Banka, (m), 31, *Shot firer.*	Lime-stone	While a shot hole was being charged a premature explosion of the gunpowder took place and seriously injured the shot firer and two other persons sitting near him The shot firer succumbed to his injuries ten days after the accident Inspection and enquiry made
136	18th May, 5 P M	Khas Jamagora Mine, Jharia P O, Bihar.	B K. Chakraborty	(1) Dibakar Bauri, (m) 39 *Shot firer,* (2) Mahindi Bouri, (m), 38, (3) Hela Bouri (m), 23, *Coal cutters*	Coal	While preparations were being made for blasting in an underground gallery, a shot firer and four others were seriously burnt by an ignition of a quantity of gunpowder that was placed in a metal case Subsequently three of them succumbed to their injuries Inspection and enquiry made
	9th August, 12 15 P M	Datla Mine, Jamuoredo P O, C P	Amalgamated Coal fields, Ld	Parmu Lohar, (m), 32, *Coal cutter*	Coal	Deceased disregarding the orders of a shot firer, passed through a fence and went to a gallery where a shot had hung fire He was within 20 feet of the face when the shot exploded He sustained serious injuries to which he succumbed 17 days later Inspection and enquiry made

APPENDIX II—*contd.*

Fatal Accident during the year 1937—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age and occupation of persons killed.	Name of mineral worked.	Cause of accident and remarks.
			BY EXPLOSIVES—(*15 deaths*)—*contd.*			
138	14th August, 1 P.M.	Rampur Mine, Rampur Colliery P. O., Orissa.	Hingir Rampur Coal Co., Ld.	Parma Gandu, (*m.*), 50, *Coal-cutter.*	Coal .	Deceased delayed after lighting two shots in a gallery and when the charges exploded he sustained serious injuries to which he succumbed shortly afterwards. Inspection and enquiry made.
139	3rd September, 2·30 P.M.	Sinidih Mine, Katrasgarh P. O., Bihar.	Sinidih Coal Concern, Ld.	Parshado Kole, (*m.*), 32. *Coal-cutter.*	Coal .	Deceased went to a place where a misfire had occurred and relighted the fuse of the charge. The shot hung fire and as he was returning to the place the shot exploded. He sustained fatal injuries. Inspection and enquiry made.
140	13th September, 6 A.M.	Kargali Mine, Bokaro P. O., Bihar.	State Railways .	Akla Mahato, (*m.*), 30. *Shot-firer's cooly.*	Coal .	While deceased was assisting in blasting operations, with liquid oxygen explosives, one charge in a round of five exploded prematurely and he sustained injuries which proved fatal. Inspection and enquiry made.
141	7th December, 4·30 P.M.	Sri Venkata Sitaramakrishna Mica Mine, Sydapuram P. O., Madras.	Balumur Subbaramaih Garu.	Eruvura Yallagadu, (*m.*), 25, *Cooly.*	Mica .	While removing loose rock in an underground gallery after blasting operations a misfired charge was exploded, resulting in serious injuries to deceased to which he succumbed twenty days later.
142	29th December, 6·15 A.M.	Gua Iron Ore, Ropeway (H. D. Bara Section), Gua P. O., Bihar.	The Indian Iron and Steel Co., Ld.	Bauna, (*m.*) 24, *Blaster.*	Iron Ore	A piece of stone was projected a distance of 373 feet during blasting operations in a quarry and struck deceased who was retiring to a place of safety in an adjoining quarry. He received injuries which proved fatal five days later. Inspection and enquiry made.
			HAULAGE—(*33 deaths*).			
143	14th January, 9·50 P.M.	Newton Chickli Mine, Parasia P. O., Central Provinces.	Newton Chickli Collieries, Ld.	Bhunnilal Dhobi, (*m.*), 20, *Tub-filler.*	Coal .	While deceased was hand-shunting an empty tub at the bottom of a haulage incline, he was caught by a train of runaway tubs and killed instantly. Inspection and enquiry made.

144	6th February, 3-45 A M	Gopalichuk East Mine, Jharia P O, Bihar	Gopalichuck Coal Co, Ld	Tilakdhari Dosadh, (m), 27, *Trolleyman*	Coal	A trolleyman was riding up a haulage road on a set of loaded tubs by standing on the buffers of the leading tub, when his head caught a timber support placed across the road He was thrown over the tub and sustained serious injuries from which he afterwards died Inspection and enquiry made
145	16th February, About 8 A M	East Khas Jharia Mine Jharia P O, Bihar	East Khas Jharia Colliery Co, Ltd	Manik Mesh, (m), 45 *Trammer*	Coal	Deceased was standing by the side of a tramline when a tub, which was running down a gradient of one in 60 overturned at a curve and he sustained injuries which proved fatal Inspection and inquiry made
146	20th February, 7 A M,	Lodna Nos 4 and 5 Pits Mine Jharia P O, Bihar	Lodna Colliery Co (1920), Ltd,	Naku Kanu, (m), 36 *Haulage engineman*	Coal	Deceased attempted to lubricate the drum bush of a main and tail rope haulage while a set of four empty tubs, which was being lowered down a haulage road dipping 1 in 10, was temporarily stopped The tubs moved down suddenly and his arm was caught between the spokes of the spur wheel causing serious injuries which proved fatal about 6 days later Inspection and enquiry made
147	[illegible] 11 30 A M	Jamuria Mine, Chirapur P O, Bengal	Equitable Coal Co Ltd	Sreewati Bouren, (f), 15 *Labourer*	Coal	In attempting to get clear of a moving set deceased crossed the haulage line tripped over the endless rope and was struck by a tub She sustained injuries which proved fatal 5 hours later Inspection and enquiry made
148	[illegible] March 8 30 P M	Ajmeri Mine Ajmeri P O, Bihar	Bengal Nagpur Railway Co, Ltd	Dukalo (m), 22, *Coal cutter*	Coal	While deceased was pushing a set of three empty tubs on a tramline he was overtaken by another set of five empty tubs and received serious injuries to which he succumbed 17 days later Inspection and enquiry made
149	[illegible] March 7 45 P M	Nandi Mine, Nandi P O Bengal	Adjai Coal Co, Ltd	Akalu Bauri, (m), 26, *Trolleyman*	Coal	Three trolleymen were attempting to re rail a loaded tub when it accidentally moved sideways and crushed deceased against a brick wall He sustained internal injuries to which he succumbed two days later The trolleymen should not have attempted to re rail the tub at a place where there was insufficient clearance between the rails and sides Inspection and enquiry made
[illegible]	[illegible] March [illegible]	Kusunda Mine Jealgora P O Bengal	Kusunda Coal Co, Ltd	Dhatu Manjhi, (m), 18 *Coal cutter*	Coal	While a set of 18 tubs was being lowered down a gradient of 1 in 15 the three front tubs got uncoupled and ran wild Deceased who was pushing an empty tub 600 feet below, was struck and killed instantly An unsuitable type of coupling was the cause of the occurrence Inspection and enquiry made
[illegible]	[illegible]	[illegible]	Government of India	Mohammad Hussain (m), 25, *Labourer*	Rock salt	While pushing a loaded tub on a fairly flat track deceased slipped and fell down on a rail He sustained some internal injuries and died almost immediately after the accident Inspection and enquiry made

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age and occupation of persons killed.	Name of mineral worked.	Cause of accident and remarks.
			HAULAGE—(33 *deaths.*)			
152	7th May, 9-45 P.M.	Newton Chickli Mine, Parasia P. O., Central Provinces.	Newton Chickli Collieries, Limited	Jagannath Kurmi, (m.), 35, *Tub-filler*	Coal	While awaiting the arrival of empty tubs deceased was leaning against a loaded set with his body between two tubs. Another set of loaded tubs came down and bumped against the stationary tubs. He sustained serious injuries to which he succumbed the following day. Inspection and enquiry made
153	25th May, 4 A.M.	Sripur Mine, Kalipahari P. O., Bengal.	Lodna Colliery Co (1929), Ltd.	Bisu Bauri, (m.), 35, *Onsetter*	Coal	On an endless haulage, while deceased and two trammers were re-railing a loaded tub, a clipman brought down two more sets of loaded tubs in quick succession. When unclipped, the third set collided with the second which bumped into the derailed tub, crushing deceased. He succumbed to his injuries 5 days later Inspection and enquiry made
154	29th May, 3-45 P.M.	Victoria West Mine, Barakar P. O., Bengal.	New Beerbhoom Coal Co., Ltd.	Biswa Nath Misir, (m.), 35, *Labourer.*	Coal	While a set of six loaded tubs was being drawn up a haulage road, dipping at 1 in 6), the haulage rope broke, and the tubs ran wild. Deceased, who, with three other persons was travelling on the haulage road contrary to orders, was struck by the set and fatally injured. Inspection and enquiry made.
155	4th June 1937, 10 A.M.	Gandudih Mine, Kusunda P. O., Bihar.	Central Alkusa Colliery Co.	Bharos Pashi, (m.), 45, *Trolleyman.*	Coal	While a train of 14 loaded tubs was about to be lowered down a haulage plane dipping at 1 in 8, the drawbar of the second tub broke, releasing the leading 12 tubs which ran wild. Deceased, who came to change the points before the train was lowered was struck by the runaway tubs and fatally injured. Inspection and enquiry made.
156	23rd June, 10 A.M.	Khowra Mine, Khowra P. O., Punjab.	Government of India.	Barkhurdar, (m.), 55, *Haulage Attendant.*	Rocksalt	A loaded tub ran down from the brow of an incline and fatally injured deceased, who was working at the bottom of the incline. Inspection and enquiry made.

157	27th June 2-15 A M	Mahakali Mine Chanda P O, C P	Aboobakar Abdulrehman & Co	Chottu Gond (m) 20 *Coal filler*	Coal	On the main haulage road of an incline, deceased was run over by an outgoing set of loaded tubs He sustained fatal injuries and died within a few minutes It is presumed that he met with the accident while attempting to cross the tram line in front of the moving set Inspection and enquiry made
158	7th July, 12-30 P M	Khewra Mine, Khewra P O, Punjab	Government of India	Mohd Akbar, (m) 18 *Miner*	Rocksalt	A loaded tub ran over the foot of deceased causing slight injuries Tetanus supervened and he died ten days after the accident Inspection and enquiry made
159	23rd July 12-15 P M	Datla Mine Junnordeo P O, C P	Amalgamated Coalfields Ltd	(1) Bhano Ahiran, (f) 24 (2) Nathri Ahiran, (f) 22 *Tub fillers*	Coal	While a set of six loaded tubs was being hauled up an incline with a variable gradient, the rope broke and allowed the set to run back The deceased were caught by the runaway tubs and fatally injured Inspection and enquiry made
160	26th July, 4 P M	Mathani Mine Sitarampur P O, Bengal	Aldih Coal Co, Ltd	Ram Charan Mondal (m) 30, *Trammer*	Coal	While a set of loaded tubs was being hauled up an underground haulage road with a gradient of 1 in 6 the set became derailed at a curve by a sudden jerk on the rope Deceased who was riding on the set without authority was thrown off and fatally injured Inspection and enquiry made
161	2nd August, 5-30 P M	Kargali Mine Bokaro P O, Bihar	State Railways' Coal Department	Makhni (f) 25, *Loader*	Coal	While a tipping tub loaded with stones was being pushed along a tram line on the top bench of a quarry it got derailed and tipped over A piece of stone thrown from the tub rolled down from the top bench and fell on the head of deceased from a height of about 25 feet She sustained injuries which proved fatal two days later Inspection and enquiry made
162	3rd August 11-30 A M	Jamuria Mine Chara pur P O, Bengal	Equitable Coal Co Ld	Kisto Dass, (m) 52 *Tub-checker*	Coal	While handshunting some loaded tubs a trammer left a loaded tub standing on an endless haulage road, dipping at 1 in 14 On bringing down the next tub he and his companion humped it so violently against the stationary tub that both the tubs ran downhill The runaway tubs travelled a distance of about 125 feet and caught deceased, who was attempting to cross the line He sustained injuries which proved fatal two days later Inspection and enquiry made
	th August 2 P M	Loyabad Mine Bausjora P O, Bihar	Barrakur Coal Co, Ld	Narain Asai, (m) 38 *Labourer*	Coal	While two trolleys carring long steel pipes were being lowered down a haulage road dipping at 1 in 4 the manila rope coupling the two trolleys ran amain Deceased who was accompanying the trolleys was struck and seriously injured by the runaway trolley He succumbed to the injuries six days later If the trolleys had been coupled together by means of a stout chain the accident would have been avoided Inspection and enquiry made

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age and occupation of persons killed.	Name of mineral worked.	Cause of accident and remarks.
			HAULAGE—(33 *deaths.*)—*contd.*			
164	26th August, 5 P.M.	Samla Govindpur Mine, Pandaveswar P. O., Bengal.	Samla Gobindpur Collieries Co	Kishore Passi, (*m.*), 20, *Underground Trammer.*	Coal .	On a tram-line sloping at 1 in 12, deceased set a loaded tub in motion and then jumped in front wheel. This caused the tub to capsize and it caught deceased against the side of a pillar, killing him instantly. Inspection and enquiry made.
165	15th September, 10-10 A.M.	Mosaboni Mine, Ghatsila P. O., Bihar.	Indian Copper Corporation Limited.	John, (*m.*), 30, *Pump attendent.*	Copper .	While an empty skip, weighing about 6 cwt., was about to be lowered in a sinking winze dipping at 70°, the rope broke inside the socket of the capping and the skip ran wild. Deceased, who was going down the winze, was struck by the runaway skip and killed instantly. Inspection and enquiry made.
166	1st October, 5-30 A.M.	Datla Mine, Jamnordeo P. O., C. P.	Amalgamated Coal-fields Ltd.	Nirpat Lodh, (*m.*), 30, *Trammer.*	Coal .	While a trammer was lying asleep across a haulage road with a gradient of about 1 in 60, he was run over and killed by a loaded tub which gravitated unattended down the road. Inspection and enquiry made.
167	7th October, 9-0 A.M.	Kustore Mine, Kusunda P. O., Bihar.	The Raneegunge Coal Association Ld.	Puniram Bilaspuri, (*m.*), 22, *Coal-cutter.*	Coal .	While a miner was walking at the side of a level haulage road the first mine-car of a set of 8 loaded cars attached to an electric locomotive became derailed. He was knocked down and received internal injuries to which he succumbed 7 days later. Inspection and enquiry made.
168	19th October, 3-30 P.M.	Jaghir Mine, Salem P. O., Madras.	The Magnesite Syndicate Ltd.	Perumal Amigoundan, (*m.*), 35, *Cooly.*	Magnesite	Deceased was knocked down by a trolley on a tram-line and sustained fatal injuries.
169	23rd October, 2-30. P.M.	Khewra Mine, Khewra P. O., Punjab.	Government of India.	Budha, (*m.*), 40, *Trammer.*	Rocksalt	Deceased was walking between two loaded tubs which were in motion. He was overtaken by the rear tub and was injured seriously. He succumbed to his injuries six days later. Inspection and enquiry made.

170	10th November, 6-15 P M	South Tisra Mine, Jharia P O Bihar	South Tisra Colliery Co, Ltd	Siban Dosad, (m) 30, *Hookman*	Coal	While a set of three full tubs was being hauled up a road rising at 1 in 4, the rope broke and the tubs ran amain Deceased was struck and fatally injured by the runaway tubs Inspection and enquiry made
171	21st November, 11 35 P M	Sitalpur Mine, Sitarampur P. O, Bengal	Sitalpur Coal Co, Ltd	Kalo Manjhi, (m), 32 *Coal-cutter*	Coal	While a set of ten empty tubs was being lowered down a gradient of 1 in 15, the leading four tubs became uncoupled and ran wild They ran into a working level and killed deceased who was waiting there for empty tubs Inspection and enquiry made
172	22nd November, 5-30 P M	Bararee Mine, Jealgora P. O, Bihar	East Indian Coal Co, Ltd	Parbil Mahato, (m), 28 *Coal-carrier*	Coal	A set of ten empty tubs was being lowered into a roadway dipping at 1 in 4 when the first four tubs became derailed, the third tub dislodging a prop which fell and struck deceased who was sitting down 20 feet away He sustained injuries to which he succumbed a few hours later. Inspection and enquiry made
173	6th December, 11-15 A M	Banksimula Mine, Charanpur P O, Bengal	Bengal Coal Co, Ltd	Dukhu Panika, (m), 37, *Loader*	Coal	On a direct haulage road, dipping at 1 in 8, a trammer left an empty tub standing but neglected to sprag it properly The tub ran wild and fatally struck deceased who was halting near the bottom of the plane Inspection and enquiry made
174	31st December, 12 Noon	New Sudamdih Mine, Patlardi P O, Bihar	New Sudamdih Colliery Ltd	Hari Ram Mahato, (m), 30, *Tram line repairer*	Coal	A set of eight empty tubs, which apparently had not been coupled to the haulage rope, was being lowered over the brow of a haulage road when the tubs ran wild and fatally injured deceased who was working on the haulage road Inspection and enquiry made
			UNDERGROUND MACHINERY—(1 death)			
175	20th February 5 A M	Toposi Mine Toposi P O, Bengal	Banera Coal Co, Ld	Bhabini Bouria, (f) 45, *Boiler*	Coal	Deceased was sleeping near a tram line with her lamp extinguished A coal-cutting machine was being brought along the tram line and she was run over She sustained injuries to which she subsequently succumbed Inspection and inquiry made
			SUNDRIES UNDERGROUND—(21 deaths)			
176	1st January 3-50 P M	Bokaro Mine Bokaro P O, Bihar	E I R and B N R	Punoo Tanti, (m) 45, *Coal-cutter*	Coal	While attempting to climb down the steep side of a quarry deceased missed his foot hold and fell through a distance of 25 feet He sustained serious injuries which proved fatal shortly afterwards Inspection and inquiry made

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age and occupation of persons killed.	Name of mineral worked.	Cause of accident and remarks.
			HAULAGE—(*33 deaths.*)—*contd.*			
164	20th August, 5 P.M.	Samla Govindpur Mine, Pandaveswar P. O., Bengal.	Samla Gobindpur Collieries Co.	Kishore Passi, (*m.*), 30, *Underground Trammer.*	Coa .	On a tram-line sloping at 1 in 12, deceased set a loaded tub in motion and then spragged its front wheel. This caused the tub to capsize and it caught deceased against the side of a pillar, killing him instantly. Inspection and enquiry made.
165	15th September, 10-40 A.M.	Mosaboni Mine, Ghatsila P. O., Bihar.	Indian Copper Corporation Limited.	John, (*m.*), 30, *Pump attendent.*	Copper .	While an empty skip, weighing about 6 cwt., was about to be lowered in a sinking winze dipping at 30°, the rope broke inside the socket of the capping and the skip ran wild. Deceased, who was going down the winze, was struck by the runaway skip and killed instantly. Inspection and enquiry made.
166	1st October, 5-30 A.M.	Datla Mine, Junnordeo P. O., C. P.	Amalgamated Coalfields Ltd.	Nirpat Lodh, (*m.*), 30, *Trammer.*	Coal .	While a trammer was lying asleep across a haulage road with a gradient of about 1 in 60, he was run over and killed by a loaded tub which gravitated unattended down the road. Inspection and enquiry made.
167	7th October, 9-0 A.M.	Kustore Mine, Kusunda P. O., Bihar.	The Raneegunge Coal Association Ld.	Puniram Bilaspuri, (*m.*), 22, *Coal-cutter.*	Coal .	While a miner was walking at the side of a level haulage road the first mine-car of a set of 8 loaded cars attached to an electric locomotive became derailed. He was knocked down and received internal injuries to which he succumbed 7 days later. Inspection and enquiry made.
168	13th October, 3-30 P.M.	Jaghir Mine, Salem P. O., Madras.	The Magnesite Syndicate Ltd.	Perumal Annigoundan, (*m.*), 35, *Cooly.*	Magnesite	Deceased was knocked down by a trolley on a tram-line and sustained fatal injuries.
169	23rd October, 2-30. P.M.	Khewra Mine, Khowra P. O., Punjab.	Government of India.	Budha, (*m.*), 40, *Trammer.*	Rocksalt	Deceased was walking between two loaded tubs which were in motion. He was overtaken by the rear tub and was injured seriously. He succumbed to his injuries six days later. Inspection and enquiry made.

70	10th November, 6-15 P M	South Tisra Mine, Jharia P. O Bihar	South Tisra Colliery Co, Ltd	Siban Dosad, (m), 30, *Hookman*	Coal	While a set of three full tubs was being hauled up a road rising at 1 in 4, the rope broke and the tubs ran amain Deceased was struck and fatally injured by the runaway tubs. Inspection and enquiry made
71	21st November, 11 35 P M	Sitalpur Mine, Sitarampur P. O, Bengal	Sitalpur Coal Co, Ltd	Kalo Manjhi, (m), 32, *Coal-cutter*	Coal	While a set of ten empty tubs was being lowered down a gradient of 1 in 15, the leading four tubs became uncoupled and ran wild They ran into a working level and killed deceased who was waiting there for empty tubs Inspection and enquiry made.
72	22nd November, 5-30 P M	Bararee Mine, Jealgora P. O., Bihar	East Indian Coal Co, Ltd	Parbti Mahato, (m), 28, *Coal-carrier.*	Coal	A set of ten empty tubs was being lowered into a roadway dipping at 1 in 4 when the first four tubs became derailed, the third tub dislodging a prop which fell and struck deceased, who was sitting down 20 feet away. He sustained injuries to which he succumbed a few hours later. Inspection and enquiry made
73	6th December, 11 15 A M.	Bankamula Mine, Charanpur P. O., Bengal	Bengal Coal Co, Ltd.	Dukhu Paniba, (m), 37, *Loader*	Coal	On a direct haulage road, dipping at 1 in 4, a trammer left an empty tub standing but neglected to sprag it properly. The tub ran wild and fatally struck deceased who was halting near the bottom of the plane Inspection and enquiry made.
74	31st December, 12 Noon.	New Sudamdih Mine, Pathardi P. O., Bihar	New Sudamdih Colliery Ltd	Hari Ram Mahato, (m), 30, *Tram-line repairer*	Coal	A set of eight empty tubs, which apparently had not been coupled to the haulage rope, was being lowered over the brow of a haulage road when the tubs ran wild and fatally injured deceased who was working on the haulage road. Inspection and enquiry made
			UNDERGROUND MACHINERY—(1 death)			
75	20th February, 5 A M	Topori Mine Topori P. O., Bengal	Bansra Coal Co, Ltd	Bhabani Bouria, (f), 45, *Loader*	Coal	Deceased was sleeping near a tram line with her lamp extinguished A coal-cutting machine was being brought along the tram line and she was run over She sustained injuries to which she subsequently succumbed Inspection and inquiry made.
			SUNDRIES UNDERGROUND—(21 deaths)			
76	1st January, 3-50 P M.	Bokaro Mine, Bokaro P. O, Bihar.	E I R. and B N R.	Panoo Tanti, (m), 45, *Coal-cutter*	Coal	While attempting to climb down the steep side of a quarry deceased missed his foot-hold and fell through a distance of 25 feet He sustained serious injuries which proved fatal shortly afterwards Inspection and inquiry made.

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age and occupation of persons killed.	Name of mineral worked.	Cause of accident and remarks.
			SUNDRIES UNDERGROUND—(*21 deaths*) —*contd.*			
177	7th January, about 6-45 P.M.	Kustore Mine, Kusunda P. O., Bihar.	Raneegunge Coal Association, Ld.	Ram Lal Bhakta, (*m*.), 40. (2) Foudi Kahar, (*m*.), 35, *Bunker-Trollymen.*	Coal	Five men were engaged in various duties in the vicinity of an underground loading bunker, when about 10 tons of coal which had jammed in the chute suddenly fell into the bunker. One end wall of the bunker collapsed and fell on the tram-line below killing two of the men instantly and seriously injuring the other three Inspection and enquiry made.
178	14th January, 5-30 A.M.	Kustore (Alkusa South Section) Mine, Kusunda P O., Bihar.	The Raneegunge Coal Association Ld.	Khiria Dosadin, (*f*.), 20, *Coal-carrier.*	Coal	In a depillaring area deceased was struck and killed instantly by a prop, 12 feet long, which was disloged by a large piece of coal that fell from the side of a pillar under extraction. Inspection and enquiry made.
179	22nd January, 3-15 P.M.	Bararee (Jealgora Section) Mine, Jealgora P. O., Bihar.	The East Indian Coal Co., Ld.	Diljan Meah, (*m*.), 17. *Loader.*	Coal	While dressing was proceeding after blasting in the side of a pillar under extraction, a mass of coal, weighing about 3 tons, fell and dislodged two props which on falling displaced a third prop. Deceased who was standing at a distance of 55 feet from the pillar was struck by the third prop and killed instantly. Inspection and enquiry made.
180	5th February, 5 A.M.	Jamadoba Mine, Jealgora P. O., Bihar.	The Tata Iron and Steel Co., Ld.	Sautak Bilaspuri, (*m*.), 40, *Coal-cutter.*	Coal	While the side of a pillar in a depillaring area was being dressed, a mass of coal, weighing about 7 cwt., rolled against a prop and dislodged it. Deceased, who was standing not far from the prop, was struck by it and sustained injuries which proved fatal 10½ hours later. Inspection and enquiry made.
181	27th February, 9-30 P.M.	Bararee Mine, Jealgora P. O., Bihar.	East Indian Coal Co., Ld.	1. Dhanu Singh, (*m*.), 35. 2 Rupan Hazam, (*m*.), 32, *Labourers.*	Coal	In a depillaring district of a seam 26 feet thick, props were being withdrawn, when without warning an area of roof measuring 280 feet × 200 feet collapsed causing an air blast. The deceased who had been engaged in withdrawing timber were proceeding to a "retreat station", when they were killed instantly by the force of the blast. Inspection and enquiry made.

182	11th March, 7-30 A M	Mosabani Mine, Ghatsila P O, Bihar	Indian Copper Corporation, Ld	Harekristo Nath, (m) 35, *Coolie*	Copper	While deceased was assisting to move a plank in a stope a large piece of ore weighing about 30 lbs rolled down the slope and struck him on the head He sustained injuries which proved fatal a few hours later. Inspection and enquiry made
183	3rd April, 7 20 P M	Benahir Mine, Jharia P O, Bihar	Standard Coal Co, Ld	Motabakeh Chamar, (m) 35 *Coal-cutter.*	Coal	While deceased was dressing down roof coal with a crowbar from a ladder he overbalanced and fell a distance of 20 feet He sustained serious injuries to his head to which he succumbed almost immediately. Inspection and enquiry made
184	3rd May 10 A M	Jharia Khas Mine, Jharia P O, Bihar	The Standard Coal Co, Ld	Dukhan Kurmi, (m) 25, *Loader*	Coal	Previous to putting up more supports a timberman and his two assistants were testing the roof of a gallery 26 high, in a depillaring area when a mass of stone, 1' 3" × 1' × 1, fell from the roof and dislodged a prop Two loaders who had entered the gallery without the knowledge of the timbermen were struck by one end of the prop One of the loaders received fatal injuries and the other was seriously injured Inspection and enquiry made.
185	8th May, 10-45 P M	Lutchipur Mine, Sitarampur P O, Bengal	Lutchipur Coal Co	Mahindi Kora, (m), 45, *Stone-cutter*	Coal	While assisting to clear a road through a fall in a gallery underground a miner was struck by a piece of stone 4' × 3' × 1 6, which rolled from the top of the fall, and fatally injured him Inspection and enquiry made
[illegible]	[illegible]	[illegible] Mine Sanctoriyak P O, Bengal	Equitable Coal Co. Ltd.	Monu Turi, (m) 43, *Coal-cutter*	Coal	While deceased was hand shunting an empty tub on an underground tramming level, a thin piece of coal fell from the roof and struck the tub In avoiding the falling coal deceased tripped over the tram line and struck his head against a pillar, sustaining fatal injuries. Inspection and inquiry made
[illegible]	[illegible]	[illegible]	[illegible] Coal Co, Ltd	[illegible] Khaira (m), 32, *Coal-cutter*	Coal	Under the supervision of a sirdar deceased was dressing down roof stone loosened by blasting when a piece 7 × 3 × 2 thick broke away at a height of 14 feet. In attempting to get clear he fell heavily on the blocks of coal lying on the floor and sustained internal injuries to which he succumbed two hours later. Inspection and enquiry made
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Manganese	Deceased with a rope tied round his waist was assisting to lower down some loose rock about 60 feet from the bottom of a quarry when a piece of stone fell and cut the rope He fell to the bottom of quarry and sustained fatal injuries

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial Number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Nationality and occupation of person killed	Nature of colliery worked	Cause of accident and other particulars
			SUNDRIES UNDERGROUND—(21 deaths)—*contd.*			
189	30th July, 4 P.M.	Katras-Chaitodih Mine, Katrasgarh P. O., Bihar.	Burrakur Coal Co., Ltd.	Inno Gope, (*m*), 35, *Labourer.*	Coal	[illegible]
190	13th August, 2-30 P.M.	Sodepur Mine, Siturampur P. O., Bengal.	Bengal Coal Co. Ltd.	Khanda Bouri, (*m*), 35, *Labourer.*	Coal	While [illegible]
191	20th August, 4 P.M.	Pandeberra Mine, Jharia P. O., Bihar.	Pandeberra Colliery Co.	Adu Rauni, (*f*), 45, *Stone-carrier.*	Coal	While [illegible]
192	12th September, 2 P.M.	Kajora Mine, Kajoragram P. O., Bengal.	Roy Dutt & Co.	Pulu Roy, (*m*), 20, *Coal-cutter.*	Coal	While deceased was standing on a ladder drawing down some overhanging coal from the corner of a pillar at a height of 12 feet, the crumber slipped from his hands and he fell to the floor with the ladder. He sustained serious injuries to which he succumbed 32 hours later. Inspection and enquiry made.
193	22nd September, 1-30 A.M.	Bararee Mine, Jealgora P. O., Bihar.	The East Indian Coal Co., Ltd.	Narayan Bowri, (*m*), 35, *Coal-cutter.*	Coal	While a miner was standing on a ladder to tum the side of a pillar at a height of 21 feet he overbalanced and fell to the floor. He was killed instantly. Inspection and enquiry made.
194	8th November, 5-35 P.M.	South Kajana Mine, Jharia P. O., Bihar.	Bagdigi Kajana Colliery Co.	Muchiram Bouri, (*m*), 35, *Pump attendant.*	Coal	While deceased was walking to his pump he slipped and fell heavily. He died on the spot from heart failure. Inspection and enquiry made.

			BY SURFACE MACHINERY—(*1 death*).			
195	24th December, 5 45 P M	Orwad Mine Udvada P O. Bombay	Narsibhai Muljibhai	Dhandoo Dagdoo. (m) 35 *Labourer*	Stone quarry	The fly wheel of a stone crusher broke while in motion and a piece of the wheel struck deceased, inflicting fatal injuries
			ON SURFACE RAILWAYS AND TRAMWAYS BELONGING TO THE MINE—(*8 deaths*)			
[illegible]	14th March, [illegible] P M.	Central Kirkend Mine. Kusunda P. O., Bihar	Central Kirkend Coal Co., Ld	Jokhan Nuniu. (m) 38. *Loading Coolie*	Coal	While wagons were being hand-shunted on a railway siding, deceased attempted to pass between two wagons He was crushed between the buffers and was fatally injured Inspection and enquiry made
[illegible]	[illegible] March [illegible]	Sitarajpur Mine, Sitarajpur P. O., Bombay	The Sitarajpur Syndicate Ltd	Mukawa Timava. (f) 27. *Labourer*	Manganese	While walking along a tramline, deceased was overtaken and run over by a tub of ore being pushed by two miners. She sustained serious injuries and died seven days later. It was subsequently disclosed that she was deaf and dumb Inspection and enquiry made.
[illegible]	[illegible]	[illegible] Mine [illegible]	[illegible] Coal Co	Bhimi Meharan. (f), 17. *Loader*	Coal	While attempting to ride on a moving train of tubs, deceased slipped and her legs were run over by the wheels of a tub She succumbed to her injuries ten days later Inspection and enquiry made
[illegible]	[illegible]	[illegible]	New Sitalandih Collieries Ltd	Itoll Bauri. (m) 30. *Trammer*	Coal	Deceased was assisting to re-rail an empty tub when his left ring finger was pinched beneath the buffer and rail He contracted tetanus and died seven days later. Inspection and enquiry made.
[illegible]	[illegible]	[illegible]	[illegible] Railway [illegible]	Manka Dhaval. (m) 17. *Loader.*	Coal	While walking alongside a moving train of empty wagons deceased was knocked down by it and sustained injuries which proved fatal a few hours later. Inspection and enquiry made.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible] (f) 40 *Tramline Worker.*	Manganese Ore	Deceased was run over by a loaded tub on a surface tramline She sustained serious injuries and died from septicaemia three days later.

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age and occupation of persons killed.	Name of mineral worked.	Cause of accident and remarks.
			ON SURFACE RAILWAYS AND TRAMWAYS BELONGING TO THE MINE—(*8 deaths*)—*contd.*			
202	7th November, 7 A.M.	North Damuda Mine, Nudkhurkee P. O., Bihar.	Shanker Lall Agarwala.	Lotan Mahato, (*m*), 62, *Carter.*	Coal .	Deceased was standing on the front of a tipping tub filled with coal which was being hauled along a surface tramline by a buffalo and a bullock He fell off the tub in between the rails and was injured. He died from shock 4 hours later. Inspection and enquiry made.
203	11th November, 3 P.M.	Makarwal Mine, Mari Indue P. O., Punjab.	Messrs. C. B. Petman and R. S. L. Ieherdas Kapoor.	Adhrim, (*m.*), 25, *Labourer.*	Coal .	A clamp of an aerial ropeway bucket got loose and the bucket ran wild on the ropeway, dipping 1 in 5. Deceased who happened to be in the bucket was thrown against the bottom terminal of the ropeway and was killed on the spot. Inspection and enquiry made.
			BY ELECTRICITY—(*2 deaths*).			
204	31st July, 11·50 A.M.	Jamadoba Mine, Jealgora P. O., Bihar.	Tata Iron & Steel Co., Ltd.	Dhaneewar Rowt, (*m.*), 22, *Labourer.*	Coal .	Deceased touched a portable electric hand-lamp and received a severe electric shock from the metallic guard. He walked a few steps and somehow got entangled with the cable serving the lamp. He collapsed and expired after he was realieed from the cable. Inspecton and inquiry made.
205	31st October, 12 Noon.	Sendra Mine, Banejora P. O., Bihar.	Sendra Coal Co., Ltd.	Manna Zolla, (*m.*), 35, *Labourer.*	Coal	A fitter with deceased was re-making a joint on the top of a post which carried a steam range. On completion of the work his right arm came in contact with a 223 volt A. C. lighting line which was attached to the post. He received a continuous electric shocks for sometime and then fell 18 ft. to the ground. He was unconscious and expired soon afterwards. The accident would not have happened had the fitter taken the precaution to see that the lighting line was dead before work was commenced. Inspection and enquiry made.

			MISCELLANEOUS ON SURFACE— *(3 deaths)*			
206	1st December, 11-45 A. M	Bokaro Mine, Bokaro P O, Bihar.	East Indian and Bengal Nagpur Railways	Bisahin Marari, (f), 25, *Coal loader*	Coal	Deceased attempted to enter a quarry by an unauthorised path and while climbing down a slope of 1 in 1.4 she fell to the bottom and sustained fatal injuries Inspection and enquiry made
207	18th December, 8 A M,	Kongon and Borjan Mine, Kongnyn P. O., Assam	The Nazira Coal Co, Ltd	Korom Singh, (m), 35, *Labourer.*	Coal	Deceased was accidentally struck by a prop which fell a distance of 30 feet from a platform He was fatally injured Inspection and enquiry made.
208	30th December, 4 30 P. M	Ramalla Stone Mine, Gaya P. O, Bihar	G W Powell and A. Ghamry.	Ram Saran Kol, (m) 35, *Stone-breaker*	Stone	While deceased was levering down stones from the slope of a hill he overbalanced and fell 55 feet down to the foot of the hill He died almost immediately Inspection and enquiry made

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age and occupation of persons killed.	Name of mineral worked.	Reason for exclusion.	Cause of accident and remarks.
			FATAL ACCIDENTS NOT INCLUDED IN THE STATISTICS—*(24 deaths.)*				
1	3rd January, 12 Noon.	Teetulmari Mine, Sijua P. O., Bihar.	Burrakur Coal Co., Ltd.	Gokul Rajwar, (*m*), 60, *Not employed.*	Coal .	Not a mining accident.	While grazing goats deceased fell into an abandoned quarry from a height of about 25 feet. Death was instantaneous. The quarry was fenced properly. Inspection and enquiry made.
2	31st January, 9 A. M.	Bhelwa Pahari Mine, Ganwan P. O., Bihar.	Ganga Saho . .	Prayag Sandi, (*m.*), 20, *Not employed.*	Coal .	Not employed.	Deceased was found buried in an abandoned prospecting pit, about 8 feet in depth. Inspection and enquiry made.
3	7th February, 9-30 P. M.	Dhansar Mine, Jharia P. O., Bihar.	Dhansar Coal Co., Ltd.	Jamru Manjhi, (*m.*), 42, *Not employed.*	Coal .	Not employed.	While deceased was crossing a surface tramline in the darkness he fell over a haulage rope which was in motion and sustained injuries which proved fatal. Inspection and enquiry made.
4	11th February, about 6-7 A. M.	Kustore Mine, Kusunda P. O., Bihar.	Raneegunge Coal Association Ltd.	Jugnarayan Tewary, (*m.*), about 22, *Label Peon.*	Coal .	Not a mining accident.	Deceased, who was subject to epileptic fits, was found drowned in an open drain on the surface which contained water to a depth of about 2 feet Inspection and enquiry made.
5	23rd February, 6-30 P. M.	Chambal and Chanuwala Stone Quarries, Sarainlamgir P. O., Punjab.	P. W. D. (Punjab), Irrigation Branch.	Ram Saran, (*m.*), 60, *Sirdar.*	Stone .	Not a mining accident.	While returning home after the end of his work in a quarry, deceased fell down from a trolley and sustained injuries which proved fatal a short time after the accident. Inspection and enquiry made.
6	9th or 10th March.	Victoria Mine, Kulti P. O., Bengal.	New Beerbhoom Coal Co., Ltd.	Runu Bibi, (*f.*), 30, *Not employed.*	Coal .	Not employed.	Deceased was found dead at the bottom of a shaft, 319 feet deep. As the shaft was securely fenced it was assumed that she had either deliberately climbed through the fence and jumped down the shaft or she had been thrown down. Inspection and inquiry made.

7	22nd March, 11 A M	Patlabari Mine, Chirkunda P O, Bihar	Shew Pujan Singh	Chand Gope (m) 48 *Not employed*	Coal	Not employed	While deceased was undermining coal in a disused quarry a mass of side 7 × 4 × 2) thick, fell on him from a height of 5 feet killing him instantly Inspection and enquiry made
8	18th April 10 A M	Upper Kandra Mine Patlarth P O, Bihar	Upper Kandra South Jharia Coal Co	Jayn Mahato (m) 65 *Not employed*	Coal	Not employed	Deceased went to take a bath in a water-logged quarry and was drowned Inspection and inquiry made
9	9th May	Lakurka Mine, Katrasgarh, P O, Bihar	Lakurka Coal Co, Ltd	Luchmi Lathak (m) 30, *Not employed*	Coal	Not employed	Deceased was drowned in an abandoned quarry, containing about 8 ft of water Inspection and enquiry made
10	11th May, 7 A M	Victoria Mine, Kulti P O, Bengal	New Beerbhum Coal Co, Ltd	Behary Singh, (m), 40, *Timberman*	Coal	Not a mining accident	While a boiler was being "blown down" a short piece of a retaining wall built over the inspection trap of the "blow down" pipe collapsed, and a large volume of steam was emitted from the trap door Ten persons who were standing near were scalded and one subsequently succumbed to his burns Inspection and enquiry made
11	9th June 6 P M	Khas Gorandjur Mine, Katrasgarh P O, Bihar	Khas Gorandjur Coal Co	Abdul Ganl, (m), 25, *Not employed*	Coal	Not employed	Deceased jumped into an abandoned quarry containing about 6 ft of water and was drowned Inspection and enquiry made
12	8th July, 7 15 A M	Samagar Mine, Jamkhanawar P O, Bengal	Sanla Collieries Ltd	Fulto Manjhin (f), 11 *Not employed*	Coal	Not a mining accident	In attempting to pass between two wagons during hand-shunting operations on a surface railway deceased was crushed between the buffers and killed instantly Inspection and enquiry made
13	9th July, 5 P M	Kargali Mine, Bokaro P O, Bihar	State Railways Coal Department	Raghunath (m), 55 *Forester*	Coal	Not a mining accident	Deceased was killed by lightning Inspection and inquiry made
14	9th July, 7 0 A M	Barasoo Mine, Jealgora P O, Bihar	East Indian Coal Co, Ltd,	Mangli Manjhin (f), 22, *Sand loader*	Coal	Not a mining accident	Deceased was standing on the line in a colliery siding when wagons were being marshalled by a railway engine She was knocked down and killed instantly Inspection and enquiry made
15	Probably 23rd July	South East Bara Coal Mine, Chandanpur P O, Bengal	Maharaja S C Nandy	Sahadev Muhi (m), 25 *Loader*	Coal	Not a mining accident	Deceased was found drowned in an abandoned trial-shaft, containing 60 feet of water The shaft was properly fenced Inspection and inquiry made
16	31st August at 6 30 P M	Mahabir Mine, Ondal P O, Bengal	Chandannulli, Indra Kumar	Petra G (m), (f) 2 *Not employed*	Coal	Not employed	Deceased was run over by a locomotive on a surface tramline She sustained serious injuries and died the following day

APPENDIX II—*contd.*

Fatal Accidents during the year 1937—*contd.*

Serial Number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age and occupation of persons killed.	Name of mineral worked.	Reason for exclusion.	Cause of accident and remarks.
			FATAL ACCIDENTS NOT INCLUDED IN THE STATISTICS—(*24 deaths*)—*contd.*				
17	5th October, 1-30 A.M.	Jamehari Selected Mines, Raniganj P. O., Bengal.	Jogmohan Kishorilal.	Khudu Manjhi, (*m.*), 42, *Fitter.*	Coal .	Not a mining accident.	Deceased died of heart failure within 15 minutes of his going underground. Inspection and enquiry made.
18	27th October, 6 A.M.	Baruhi Limestone Mine, Banjari P. O., Bihar.	Ram Prashad Mehra.	Ghuria Doshadhin, (*f.*), 28, *Not employed.*	Limestone	Not employed.	Deceased was digging earth from an undercut side of an abandoned quarry when the side collapsed. She was struck by a mass of stone 1' × 1' 9' and died instantly. Inspection and enquiry made.
19	3rd November, 4-30 P.M.	Madhabpur Mine, Ondal P. O., Bengal.	Chandanmull Indrakumar.	Kaloo, (*m.*), 22, *Coal-cutter.*	Coal .	Not a mining accident.	During a fit of insanity deceased throw himself down a shaft 199 ft. deep and was killed instantly. Inspection and enquiry made.
20	13th November, 12-30 P.M.	Lakurka Mine, Katrasgarh P. O., Bihar.	Lakurka Coal Co., Ltd.	Dukhni Kole, (*f.*), 25, *Not employed.*	Coal .	Not employed.	Deceased went to a boiler feed tank containing about 10 feet of water, for washing purposes and was drowned. Inspection and enquiry made.
21	25th November, 4-0 A.M.	Kurhurbaree Mine, Giridih P. O., Bihar.	The Government of India.	Tettoo Rai, (*m.*), 12, *Not employed.*	Coal .	Not employed.	While a boy was warming himself near a heap of boiler ashes his clothing caught fire. He succumbed to his burns 16 days later. Inspection and enquiry made.
22	29th November, 11-45 P.M.	Bhulan bararee Mine, Pathardihi P. O., Bihar.	Bhulan bararee Coal Co., Ltd.	Situ Bouri, (*m.*), 35, *Coal-cutter.*	Coal .	Not a mining accident.	Deceased was sitting near a fire in the compound of his dwelling, when his clothing caught fire. He sustaines serious burns to which he succumbed the following day. Inspection and enquiry made.

23	20th December 6-30 A M	Pretoria Mine, Charanpur P O, Bengal	Seebpore Coal Co, Ltd	Santi Bourin, (f) 22, *Attendant of an injured worker*	Coal	Not a mining accident	While deceased was sitting near a fire on the verandah of her dwelling, her clothing caught fire, causing severe burns to her body She died of shock 16 hours later Inspection and enquiry made
24	20th December, 12 15 A M	Kirkend Kusunda Mine P O, Bihar	Kripash nker D Worah	Dukhni Kole, (f), 18, *Loader*	Coal	Not a mining accident	During a cold night deceased was sleeping near a fire in her dewelling, when her clothing caught fire She was severely burnt and died about 15 hours later Inspection and enquiry made

APPEN

Table

Statement of fatal and serious accidents in and about Mines

Province.	District and Mineral field.	Number of separate fatal accidents.	Number of deaths.						
			Underground.		Open workings.		Surface.		Total.
			Males.	Females.	Males.	Females.	Males.	Females.	
									FATAL CO
Assam	Khasi and Jaintia Hills		...	.	...	...	...	...	...
	Lakhimpur—Makum coalfield.	3	4	...	...	...	...	...	4
	Naga Hills—Nazira coalfield.	1	...	...	...	...	1	...	1
Bengal (and part of Bihar).	Raniganj coalfield	51	54	4	...	...	...	...	58
Bihar	Jharia coalfield	83	84	3	2	1	5	...	95
	Bokaro ,,	7	1	...	3	2	...	1	7
	Karanpura ,,	1	...	..	1	...	...	...	1
	Giridih ,,	6	7	...	...	...	1	..	8
Central Provinces	Betul	1	3	...	...	...	..	...	3
	Chanda	1	1		...	...	...	...	1
	Chhindwara—Pench Valley coalfield.	12	11	3	...	...	...	1	15
Orissa	Sambalpur—Hingir-Rampur *coalfield.*	1	1	...	...	...	...	...	1
Punjab	Salt Range coalfield	5	5	.	...	...	1	...	6
	Total (Coal)	172	171	10	6	3	8	2	200

DIX II.

No. 2.

regulated by the Indian Mines Act, during the year 1937

ACCIDENTS.				SERIOUS ACCIDENTS											
Death rate per 1 000 persons employed				Number of separate serious accidents	Number of persons seriously injured							Serious injury rate per 1 000 persons employed			
					Under ground.		Open workings		Surface						
Underground	Open workings	Surface	Underground Open workings and Surface		Males	Females	Males	Females	Males	Females	Total	Underground	Open workings	Surface	Underground Open workings and Surface
AL															
				1	2						2	9.5 24	..		50 00
3 30			2 25	93	90				3	1	94	74 32		7 39	52 96
		11 11	3 62												
1 50			1 00	218	1 5	8		1	36	7	227	4 74	0 98	3 86	3 93
2 01	0 51	0 20	1 28	2 9	219	6	3		65	4	237	5 20	0 51	2 35	3 87
0 40	0·75	0·40	0 60	44	15		16	4	8	2	45	5 93	2 98	4 05	3 84
	0 70		0 29	14	9		1		4		14	7 49	0 70	4 65	4 01
1 48		0 40	1 30	80	74	2			5		80	15 88		3 51	12 98
61 22			23 62												
0 52			0 40	9	7				2		9	3 67		3 49	3 62
2 28		0 37	1 61	41	36				8		44	5 87		2 97	4 73
4 90			3 10												
3 36		1 13	2 50	14	6				8		14	4 05		9 04	5·83
1 77	0 58	0·19	1 17	793	653	15	20	5	129	14	816	6			

APPEN

Table

Statement of fatal and serious accidents in and about Mines

Province.	District and Mineral field.	Number of separate fatal accidents	Number of deaths. Underground. Males.	Underground. Females.	Open workings. Males.	Open workings. Females.	Surface. Males.	Surface. Females.	Total
									FATAL
									IRON
Bihar	Singhbhum .	2	...	...	2	...	...	...	2
									MANGA
Bombay . . .	Panch Mahals . .	2	...	.	1	...	...	1	2
Central Provinces	Balaghat . . .	3	1	...	1	...	...	1	3
	Bhandara . . .	...	...	...	...	...	...	...	...
	Nagpur . . .	...	...	..	..	...	...	...	...
	Total (Manganese)	5	1	...	2	...	...	2	5
									CHROMITE
Baluchistan . . .	Upper Zhob . . .	1	1	...	...	...	...	...	1
Bihar. . . .	Singhbhum . .	...	...	...	...	...	...	...	...
	Total (Chromite ore) .	1	1	...	...	...	...	...	1

DIX II—*contd.*

No. 2—*contd*

regulated by the Indian Mines Act, during the year 1937—*contd*

ACCIDENTS				SERIOUS ACCIDENTS											
Death rate per 1 000 persons employed				Number of separate serious accidents	Number of persons seriously injured							Serious injury rate per 1 000 persons employed			
					Underground		Open workings		Surface						
Underground	Open workings	Surface	Underground Open workings and Surface		Males	Females	Males	Females	Males	Females	Total	Underground	Open workings	Surface	Underground Open workings and Surface
ORE															
	0 25		0 18	9			1		8		9		0 12	2 81	0 83
NESE															
	1 27	2 46	1 58	14	6		4		4		14	80·00	5·08	9 85	11 03
1 71	0 11	0 50	0 27	16			5	2	8	1	16		0 80	4 50	1 42
				10				3	5	2	10		0 82	17 51	2 47
				4			2	1	1		4		0 50	1 75	0 60
1 37	0 09	0 52	0 19	44	6		11	6	18	3	44	8 24	0 78	5 44	1 68
ORE															
9·09			1 99	2	1		1				2	9 09	4 37		3·98
				1			1	1			2		2 23		2 14
9 09			0 68	3	1		2	2			4	9 09	2		

APPEN

Table

Statement of fatal and serious accidents in and about Mines

Province.	District and Mineral field.	Number of separate fatal accidents.	Number of deaths. Underground. Males.	Underground. Females.	Open workings. Males.	Open workings. Females.	Surface. Males.	Surface. Females.	Total.
									FATAL
									COPPER
Bihar	Singhbhum	7	8	...	...	...	...	...	8
									MI
Bihar	Gaya	2	...	...	1	1	...	...	2
	Hazaribagh	3	2	...	4	...	...	...	6
	Manbhum	...	...	...	...	...	...	...	...
	Monghyr	1	1	...	...	...	...	...	1
Madras	Nellore	2	1	...	1	...	...	...	2
Rajputana	Ajmer-Marwara	1	...	...	1	...	...	...	1
	Total (Mica)	9	4	...	7	1	...	...	12
									SA
Punjab	Jhelum	1	4	...	...	...	...	...	4
	Mianwali	...	...	..	...	...	...	...	...
	Total (Salt)	4	4	...	...	.	...	...	4

DIX II—*contd.*

No. 2—*contd.*

regulated by the Indian Mines Act, during the year 1937—*contd.*

ACCIDENTS.				SERIOUS ACCIDENTS												
Death rate per 1,000 persons employed.				Number of persons seriously injured.									Serious injury rate per 1,000 persons employed.			
					Underground		Open workings		Surface							
Underground	Open workings	Surface	Underground and Open workings all Surface	Number of persons killed in all	Males	Females	Males	Females	Males	Females	Total	Underground	Open workings	Surface	Underground and Open workings all Surface
ORE															
4·93	–	–	2·47	1·58	[illegible]	–			[illegible]		1·[illegible]	24·62	–	[illegible]	[illegible]
CA															
	2·73	–	1·47	2	2	–	–	–			2	[illegible]	–		[illegible]
0·17	1·31	–	[illegible]	2	1	–	1	2		2	24	1·64	[illegible]	[illegible]	[illegible]
												[illegible]			[illegible]
–	–	–	–	1	1		–						–	–	–
1·99	–	–	[illegible]	–	–	–	–								
0·63	0·63	–	0·41	2	2	–	–	–			2	1·41	–	1	[illegible]
–	2·20	–	1·[illegible]	1	1	–	–	2			2		[illegible]		[illegible]
0·24	1·15	–	[illegible]	[illegible]	[illegible]		1	4	1	2	1	–	[illegible]	[illegible]	[illegible]
LT															
6·21	–	–	[illegible]	3	4	–	–	–		2	–	1	2	[illegible]	–	[illegible]
–	–	–	–	1	1	–	–				–	1	2	[illegible]	–	–
4·51	–	–	[illegible]	3	4	–	–	–		2			3	[illegible]	–	[illegible]

APPEN

Table

Statement of fatal and serious accidents in and about Mines

Province.	District and Mineral field.	Number of separate fatal accidents.	Number of deaths. Underground. Males.	Underground. Females.	Open workings. Males	Open workings. Females.	Surface. Males.	Surface. Females.	Total.
FATAL									
STÒ									
Bihar	Gaya	1	...	...	...	..	1	...	1
	Santal Parganas	1	...	...	1	...	...	...	1
Bombay	Bombay Surbaban	...	...	...	...	...	...	...	...
	Surat	1	...	...	...	...	1	...	1
Madras	Chingleput	...	...	...	...	..	...	...	...
	East Godavari	1	...	...	1	...	...	...	1
	Total (Stone)	4	...	...	2	...	2	...	4
LIME									
...	Shahabad	1	...		1	...	...	...	1
...tral Provinces	Jubbulpore	1	...	...	7	2	...	..	9
Punjab	Attock	1	...	...	1	...	...	...	1
	Jhelum	...	...	...	...	...	...	...	...
	Total (Limestone)	3	...	...	9	2	...	...	11

DIX II—*contd.*

No. 2—*contd.*

regulated by the Indian Mines Act, during the year 1937—*contd*

ACCIDENTS				SERIOUS ACCIDENTS											
Death rate per 1,000 persons employed				Number of separate serious accidents	Number of persons seriously injured							Serious injury rate per 1 000 persons employed			
					Underground		Open workings		Surface						
Underground	Open workings	Surface	Underground Open workings and Surface		Males	Females	Males	Females	Males	Females	Total	Underground	Open workings	Surface	Underground Open workings and Surface
NE															
		333 33	1 74												
	0 56		0 36												
				1				1			1		29 41		10 64
		40 00	1 85												
				6			2		3	1	6		2 47	25 64	6 22
	12 82		12 82												
	0 5	0 91	0 40	7			3	1	3	1	7		0 38	1 83	0 70
STONE															
	0 57		0 39	5			3	1	1		5		2 28	1 23	1 95
	2 36		2 21	14			9	1	4		14		2 62	15 50	3 44
	2 60		2 60	2			2				2		5 20		5 20
				1					1		1			142 86	20 83
	1 57		1 30	22			14	2	6		22			31	

APPEN

Table

Statement of fatal and serious accidents in and about Mines

FATAL

Province.	District and Mineral field.	Number of separate fatal accidents.	Number of deaths						
			Underground.		Open workings.		Surface.		
			Males.	Females.	Males.	Females.	Males.	Females.	Total.
									MAG
Madras	Salem	1	...	...	1	...	...	...	1
									CHINA
Bihar	Singhbhum	...	...	...	...	...	...	...	...
	Grand Total (All minerals).	208	189	10	29	6	10	4	248

DIX II—*contd.*

No. 2—*concld.*

regulated by the Indian Mines Act, during the year 1937—*concld.*

ACCIDENTS				SERIOUS ACCIDENTS											
Death rate per 1,000 persons employed				Number of separate serious accidents	Number of persons seriously injured							Serious injury rate per 1 000 persons employed			
					Underground		Open workings		Surface.						
Underground	Open workings.	Surface	Underground, Open workings and Surface		Males	Females	Males	Females.	Males	Females	Total	Underground	Open workings	Surface	Underground Open workings and Surface
NESITE															
.	0 72		0 64	2				1	1	...	2		0 72	5 43	1 28
CLAY															
..		...		1			..		1		1		..	2 67	1 06
1 62	0 48	0 19	0 93	1,085	825	15	54	17	186	18	1,115	6 84	0 98	2 82	4 16

APPEN

Table

Statement of fatal and serious accidents in and about Mines

Province.	District and Mineral field.	Number of separate fatal accidents.	Number of deaths.						
			Underground.		Open workings.		Surface.		
			Males.	Females.	Males.	Females.	Males.	Females.	Total.
FATAL									
MAG									
Madras	Salem	1	...	...	1	...	...	...	1
CHINA									
Bihar	Singhbhum . . .	...	...	...	...	...	...	...	...
	Grand Total (All minerals).	208	189	10	29	6	10	4	248

DIX II—contd.

No. 2—*concld.*

regulated by the Indian Mines Act, during the year 1937—concld.

ACCIDENTS				SERIOUS ACCIDENTS												
Death rate per 1,000 persons employed				Number of separate serious accidents	Number of persons seriously injured								Serious injury rate per 1,000 persons employed.			
					Underground.		Open workings		Surface.							
Underground	Open workings.	Surface	Underground, Open workings and Surface		Males	Females	Males	Females	Males	Females	Total		Underground.	Open workings	Surface	[illegible]
NESITE																
	0·72		0·64	2				1	1	—	2		—	[illegible]	[illegible]	[illegible]
CLAY																
		...		1			—		1	—			—	[illegible]	—	
1·62	0·48	0·19	0·93	1,085	825	15	54	17	[illegible]	—	—	—	[illegible]	[illegible]		

APPENDIX II—*concld.*

Table No. 3.

Statement of fatal accidents in Mines regulated by the Indian Mines Act, during the year 1937, classified according to cause of accident.

Mineral worked.	Number of separate accidents.	Number of persons killed.												Death rate per 1,000 persons employed.		
		Explosions and ignitions of fire-damp and coal dust.	Falls of roof.	Falls of sides.	In shafts.	Suffocation by gases.	By explosions.	By irruptions of water.	Haulage.	Miscellaneous underground.	Electricity.	Surface.	Total deaths.	Underground.	Open workings.	Surface.	Underground, Open workings and Surface.
Coal	172	2	71	19	10	2	9	...	27	20	2	3	200	1·77	0·58	0·19	1·17
Iron Ore	2	...	...	1	...	.	1	..	...	...	...	...	2	...	0·25	...	0·18
Manganese Ore	5	...	1	1	...	...	.	..	...	1	...	2	5	1 37	0·09	0·52	0·19
Chromite Ore	1	...	...	1	...	...	...	...	...	...	...	...	1	9·09	...	...	0·68
Copper Ore	7	...	4	...	2	..	...	.	1	1	...	...	8	4·95	...	...	2 49
Mica	9	...	2	8	...	...	2	..	...	..	...	...	12	0·24	1·15	...	0·41
Salt	4	...	...	...	...	.	...	..	4	...	...	...	4	4·51	...	...	2·96
Stone	4	...	...	1	...	..	1	.	...	...		2	4	...	0·25	0 91	0·40
Limestone	3	...	...	9	...	...	2	...	...	..	...	...	11	...	1·57	...	1·30
Magnesite	1	..	...	...	...	...	...	...	1	...	...	...	1	...	0·72	...	0·64
Total for 1937	208	2	78	70	12	2	15	..	33	22	2	12	248	1·62	0·48	0·19	0·93
Total for preceding year.	214	213	67	74	7	35	12	...	25	19	3	22	477	3·17	0·53	0 37	1·77
Difference	—6	—211	+11	—4	+5	—33	+3	...	+8	+3	—1	—10	—229	—1·55	—0 05	—0·18	—0·84

APPENDIX III.

Statement of prosecutions under the Indian Mines Act, during the year 1937

Province.	District	Number of prosecutions	Number of persons prosecuted	Number of persons convicted	Number of Regulations Bye-laws and Rules and Sections of the Act contravened	Remarks
Bengal	Burdwan	1	1	1	Section 1(1) and (2) of the Indian Mines Act 1923, read with Regulation 27(a) made under the Act	
	Do.	1	3	3	Regulation 4(b) of the regulations for prohibiting the employment of women underground in mines contained in Notification No. M 1035 dated the 7th March 1935 issued by the Government of India Department of Industries and Labour read with Section 32 (1) and (3) of the Indian Mines Act, 1923, and Regulation 149 of the Indian Coal Mines Regulations 1926 and Bye-Law 3 made under Sections 32 and 33 of the Indian Mines Act 1923	
	Do.	2	2	2	Regulation 149 of the India Coal Mines Regulations, 1926 Bye Law 3 made under Section 32 of the Indian Mines Act, 1923 and Section 25 B(7) of the same Act	
	Do.	3	3	3	Regulation 149 of the Indian Coal Mines Regulations 1926 and Bye-Law 3 made under Section 32 of the Indian Mines Act, 1923, and Regulation 4(b) of the Regulations for prohibiting the employment of women underground in mines issued under Notification No. M 1035, dated the 7th March 1935 and No. M 1035 dated the 7th February 1937 by the Government of India Department of Industries and	

[illegible]

[illegible]

Statement of [illegible] under the [illegible] for the year [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]						
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

APPENDIX III—*contd.*

Statement of Prosecutions under the Indian Mines Act, during the year 1937—*contd.*

Province	District	Number of prosecutions.	Number of persons prosecuted.	Number of persons convicted	Number of Regulations, Bye laws and Rules and Sections of the Act contravened.	REMARKS
Bihar—*contd*	Manbhum	1	3	3	Regulations prohibiting the employment of women underground in mines, embodied in Government of India, Department of Industries and Labour, Notification No M 10[illegible] dated the 1st February 1937, read with Notification No M 10[illegible], dated the 17th June 1937 and Regulation 143 of the Indian Coal Mines Regulations 1926 read with Section 28(4) of the Indian Mines Act and Rule 94 of the rules made by the Bihar Government under Section 30 of the Indian Mines Act 1923	
	Do	1	2	1	Regulation 143 of the Indian Coal Mines Regulations, read with section [illegible] of the Indian Mines Act 1923 and Rule [illegible] of the Rules made by the Bihar Government under Section [illegible] of the Indian Mines Act 1923	
	Do	1	2	—	[illegible]	
	Do	1	3	3	[illegible]	

APPENDIX III—*contd.*

Statement of Prosecutions under the Indian Mines Act, during the year 1937—*contd.*

Province.	District.	Number of prosecutions.	Number of persons prosecuted.	Number of persons convicted.	Number of Regulations, Bye-laws and Rules and Sections of the Act contravened.	REMARKS.
Bihar—*contd.*	Manbhum—*contd.*				with Notification No. M 1055, dated the 17th June 1937, Section 28(4), read with Rule 9A of the rules made by the Bihar Government, Bye-Law 31 of the Bye-Laws for coal mines and Regulation 149 of the Indian Coal Mines Regulations, 1926, read with rule 9A of the rules made by the Bihar Government and Section 28(4) of the Indian Mines Act, 1923.	
	Do. . .	1	2	2	Regulations 15(3), 67 and 137 of the Indian Coal Mines Regulations, 1926.	
	Do. . .	1	2	2	Regulations 138(1), 69(2), 15(3) and 15(4) of the Indian Coal Mines Regulations, 1926, Section 23B (1) of the Indian Mines Act, 1923, and Rules 8 and 9 of the Rules made by the Bihar Government under Section 30 of the Indian Mines Act, 1923.	
	Do. . .	1	4	4	Regulation 69(2) of the Indian Coal Mines Regulations, 1926.	
	Do. . .	1	4	4	Regulation 149 of the Indian Coal Mines Regulations, 1926, read with Rule 9A of the Rules made by the Bihar Government under Section 30 of the Indian Mines Act, 1923 and Regulation 4(b) of the Government of India, Department of Industries and Labour, Notification No. M 1055, dated the 7th March 1929.	

APPENDIX III—*contd.*

Statement of Prosecutions under the Indian Mines Act, during the year 1937—*contd.*

Province	District	Number of prosecutions	Number of persons prosecuted	Number of persons convicted	Number of Regulations, Bye laws and Rules and Sections of the Act contravened	Remarks
Bihar—*contd*	Manbhum	1	3	3	Regulation 149 of the Indian Coal Mines Regulations 1926 read with Section 28 of the Indian Mines Act 1923, and Rule 9 of the rules made by the Bihar Government under Section 30 of the Indian Mines Act, 1923 and regulation 4 embodied in Government of India, Department of Industries and Labour, Notification No M 1035, dated the 7th March 1929	
	Do	1	2	2	Orders under Section 19 (2) of the Indian Mines Act, 1923.	
	Do	1	3	2	Regulations 24(3) 70(2) and 149 of the Indian Coal Mines Regulations 1926 read with Bye-Law 95 made under Section 32 of the Indian Mines Act 1923, and regulation 4(b) issued under Notification No M 1035 dated the 7th March 1929 issued by the Government of India Department of Industries and Labour	
	Do	1	4	4	Regulations 15(3) and 67, read with Regulations 69 and 137 of the Indian Coal Mines Regulations, 1926, and Section 23 B(1) of the Indian Mines Act 1923	
	Do	1	3	3	Regulation 4(1) (b) of the Regulations for prohibiting the employment of women underground in mines embodied in Government of India, Department of Industries and Labour, No M 1035	

APPENDIX III—*contd.*

Statement of Prosecutions under the Indian Mines Act, during the year 1937—*con*

Province.	District.	Number of prosecutions.	Number of persons prosecuted	Number of persons convicted.	Number of Regulations, Bye-laws and Rules and Sections of the Act contravened.	REMARKS.
	Manbhum—*contd.*					
	Santal Parganas.	1	3	3	7th March 1929, read with Notification No. M 1055, dated the 17th June 1937, Section 22(c) (3) read with Section 23(b) (1) of the Indian Mines Act, 1923 and Regulation 149 of the Indian Coal Mines Regulations, 1926, read with Section 22(4) of the same act and Rule 9A of the rules made by the Bihar Government under Section 30 of the Indian Mines Act, 1923.	
har—contd.	Bhagalpur .	1	2	—	Section 29 of the Indian Mines Act, 1923 and Regulations 102 and 103 of the Indian Coal Mines Regulation, 1926, read with Bye-Law 15 made under Section 30 of the Indian Mines Act, 1923.	
	Manbhum .	1	1	1	Section 29(j), read with Notification No. M 1055, dated the 7th March 1929 issued by the Government of India, Department of Industries and Labour.	Both the accused were acquitted.
					Orders under Section 19(2), Section 15 and Section 26, read with Section 26A of the Indian Mines Act, 1923, Rule 9A of the rules made by the Bihar Government, under Section 30 of the Indian Mines Act, 1923, read with Regulation 149 of the Indian Coal Mines Regulations, 1926, and Regulation 4(b) of the regulations prohibiting employment of women underground	

APPENDIX III—*contd.*

Statement of Prosecutions under the Indian Mines Act, during the year 1937—*contd.*

Province.	District	Number of prosecutions.	Number of persons prosecuted	Number of persons convicted	Number of Regulations, Bye-laws and Rules and Sections of the Act contravened	Remarks.
	Manbhum—*contd.*				in mines issued under Government of India Department of Industries and Labour, Notification No M 1055 dated the 7th March 1929	
	Do. . .	1	1	1	Orders under Section 13(2) of the Indian Mines Act 1923	
	Do . .	1	3	3	Regulations 145 and 149 of the Indian Coal Mines Regulations, 1926 and Bye-Law 95 made under Sections 29 and 32 of the Indian Mines Act, 1923, and Regulation 4(b) of the regulations prohibiting the employment of women underground in mines contained in Notification No M 1055, dated the 7th March 1929 of the Government of India Department of Industries and Labour	
har—*contd.*	Do . .	1	3	3	Section 29(3), read with Notification No M 1055, dated the 7th March 1929 issued by the Government of India, Department of Industries and Labour Regulation 24, read with Section 15 of the Indian Mines Act, 1923, and Regulation 70 of the Indian Coal Mines Regulations, 1926	
	Do. . .	1	3	3	Regulation 4(b) of the regulations embodied in Notification No M 1055, dated the 7th March 1929 read with Notification No. M 1055, dated the 17th June 1937 issued by the Government of India, Department of Industri Labo	

APPENDIX III—*contd.*

Statement of Prosecutions under the Indian Mines Act, during the year 1937—*contd.*

[illegible]	District.	Number of [illegible]	Number of [illegible]	Number of [illegible] convicted	Number of Regulations, Bye-laws and Rules and Section of the Act contravened	Remarks
	[illegible]				7th March 1929, read with Notification No. M 1055, dated the 17th June 1937, Section [illegible] read with Section 23(3) of the Indian Mines Act, Regulation 149 of the Indian Coal Mines Regulations, 1926, read with Section 2(4) of the same act and Rule 9A of the rules made by the Bihar Government under Section 30 of the Indian Mines Act, Read.	
[illegible]	[illegible] Parganas.	1	3	3	Section 29 of the Indian Mines Act, 1923 and Regulations 102 and 103 of the Indian Coal Mines Regulation, 1926, read with By-Law 15 made under Section 29 of the Indian Mines Act, 1923.	
	Bhagalpur . .	1	2	—	Section 23(3), read with Notification No. M 1055, dated the 7th March 1929 issued by the Government of India, Department of Industries and Labour.	Both the accused were acquitted.
	Manbhum . .	1	1	1	Orders under Section 19(2), Section 15 and Section 26, read with Section 26A of the Indian Mines Act, 1923, Rule 9A of the rules made by the Bihar Government, under Section 30 of the Indian Mines Act, 1923, read with Regulation 119 of the Indian Coal Mines Regulations, 1926, and Regulation 4(b) of the regulations prohibiting employment of women underground	

Statement [illegible]

Provi[illegible]

[illegible] CLE

No 2 Circle

[illegible] mines in Assam

[illegible] mines in Bengal

[illegible] straight line across the District

[illegible] mines in Bombay

[illegible] mines in the Central Provinces

[illegible] mines in Madras

[illegible]

managers' certificates of
were granted during the

of competency

Date of British certificate

21st July 1933

[illegible]0th July 1936

APPENDIX III—*concld.*

[illegible] Prosecutions under the Indian Mines Act, during the year 1937—*concld.*

Province	District	Number of prosecutions [illegible]	Number of persons [illegible]	Number of persons [illegible]	Number of Regulations, Bye-laws and Rules [illegible] of the Act contravened.	Remarks.
[illegible]	Mr[illegible]				12[illegible] and 14[illegible] of the Indian Coal Mines Regulations, 1926, read with Bye-Law 9[illegible] made under [illegible] of the Indian Mines Act, 1923, and Rule 9A of the rules made by the Bihar Government under [illegible] of the Indian Mines Act, 1923, and Bye-Law 31 of the Bye-laws for coal mines made under the Act.	
	Do.	1	1	1	Regulation 363 of the Indian Coal Mines Regulations, 1926	
	[illegible]	1	1	1	Section 19 of the Indian Mines Act, 1923, read with Regulation 9 of the Indian Coal Mines Regulations, 1926.	Two of the accused were acquitted.
[illegible]	Do.	1	1	1	Regulation 115 made under Section 29 of the Indian Mines Act, 1923.	
	Do.	1	1	1	Regulation 110 made under Section 29 of the Indian Mines Act, 1923.	
	Jubbulpur	1	2	2	Regulation 38 of the Indian Coal Mines Regulations, 1926, and Rule 37 made under the Indian Mines Act, 1923.	
Madras	Nellore	1	2	2	Regulations 84 and 91 of the Indian Coal Mines Regulations, 1926.	
		16	100	89		

APPENDIX IV.

Miscellaneous.

Statement No. 1.

List of Inspection Circle.

No 1 Circle	No 2 Circle
1. All mines in Baluchistan	1 All mines in Assam
2 All mines in Bihar except mines in the District of the Santhal Parganas and such mines in the District of Manbhum as lie east of a line drawn from mile 175 on the Bengal Nagpur Railway to mile 169 on the Grand Trunk Road and continued in a straight line across the District	2 All mines in Bengal. [illegible] a straight line across the District.
3 All mines in Orissa	
4 All mines in the North-West Frontier Province	4 All mines in Bombay
All mines in the Punjab	5 All mines in the Central Provinces.
All mines in Rajputana.	6. All mines in Madras.
All mines in the United Provinces	

Statement No 2.

Names of persons to whom first and second class coal mine [illegible] competency and surveyors' certificates of competency [illegible] year 1937.

Certificates granted to holders of British certificates [illegible]

(a) First class.

Name	Number of Ind an certificate.	Date of [illegible] certificate	[illegible]	[illegible]
Moir, Alexander . .	353	[illegible]	[illegible]	[illegible]
Wainwright, George .	354	[illegible]	[illegible]	[illegible]

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 2—*contd.*

Names of persons to whom first and second class coal mine managers' certificates of competency and surveyors' certificates of competency were granted during the year 1937—*contd.*

Certificates granted to holders of British certificates of competency—*contd.*

(*a*) FIRST CLASS—*contd.*

Name.	Number of Indian certificate.	Date of Indian certificate.	Number of British certificate.	Date of British certificate.
Nragundkar, Satchidanand Keshav	385	27th January 1937	2898	2nd May 1935.
Lomax, James	386	Ditto . .	2844	8th February 1935.
Anderson, Donald . . .	387	21st April 1937 .	2899	14th February 1936.
Wright, William John . . .	388	16th November 1937	2326	25th January 1929.
Griffith, Kenneth . . .	389	Ditto . .	2767	26th January 1934.
Willis, William Stanley . .	390	Ditto . .	2527	13th February 1931.
Taylor, Mathew . . .	391	Ditto . .	2231	25th January 1929.
Engineer, Behram Hormasjee .	392	Ditto . .	2974	4th February 1937.

INDIAN CERTIFICATES.

(*a*) FIRST CLASS.

Name.	No. of certificate.	Date of certificate.	REMARKS.
Prasad, Dharmanath	255	21st April 1937.	
McCue, Neil Bertram	256	Ditto.	
Roy, Pratul Kumar	257	Ditto.	
Yasin, Mohammad	258	Ditto.	
Datta, Anilendra Nath	259	Ditto.	
Gupta, Pramod Chandra	260	Ditto.	
Mitra, Durga Prasanna	261	Ditto.	

APPENDIX IV—*contd*

Miscellaneous—*contd.*

Statement No 2—*contd.*

Names of persons to whom first and second class coal mine managers' certificates of competency and surveyors' certificates of competency were granted during the year 1937—*contd*

INDIAN CERTIFICATES—*contd*

(*b*) SECOND CLASS

Name	No of certificate	Date of certificate	REMARKS
Mukherjee Chandra Sekhar	530	21st April 1937	
Srinivasan Govindaswami	531	Ditto.	
Krishnan, Subhuswami Iyer Gopala	532	Ditto.	
Chatterjee Hemendra Nath	533	Ditto	
Rogers Clarence Arnold Joseph	534	Ditto	
Bhatt Hemant Kumar Krishnaprasad	535	Ditto	
Ghosh Bikash Chandra	536	Ditto.	
Tayab Mohammed	53	Ditto	
Ghose Hari Charan	538	Ditto	
Ghose Hiran Kumar	539	Ditto	
Chowdhury Nagendra Mohan	540	Ditto	
Burman Kartick Chandra	541	Ditto	
Adhikary Bhupendra Nath	542	Ditto	
Maity Nilmoni	543	Ditto	
Verma, Achyuta Nand	544	Ditto	
Roy Bibhuti Bhusan	545	Ditto	
Bizy Sayyad Riyazul Hasan	546	Ditto	
Paul Manmatha Nath	547	Ditto	
Dutt Sudhanshu Kumar	548	Ditto	
Ghatak Har Pada	549	Ditto	
Gandhar Ladli Prasad	550	Ditto	
Banerjee, Ajit Kumar	551	Ditto	

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 2—*contd.*

Names of persons to whom first and second class coal mine managers' certificates of competency and surveyors' certificates of competency were granted during the year 1937—*contd.*

Certificates granted to holders of British certificates of competency—*contd.*

(*a*) First class—*contd.*

Name.	Number of Indian certificate.	Date of Indian certificate.	Number of British certificate.	Date of British certificate.
Nragundkar, Satchidanand Keshav	385	27th January 1937	2598	2nd May 1935.
Lomax, James	386	Ditto . .	2844	8th February 1935.
Anderson, Donald . . .	387	21st April 1937 .	2899	14th February 1936.
Wright, William John . . .	388	16th November 1937	2326	25th January 1929.
Griffith, Kenneth . . .	389	Ditto . .	2767	26th January 1934.
Willis, William Stanley . .	390	Ditto . .	2527	13th February 1931.
Taylor, Mathew . . .	391	Ditto . .	2271	25th January 1929.
Engineer, Behram Hormasjee .	392	Ditto . .	2974	4th February 1937.

INDIAN CERTIFICATES.

(*a*) First class.

Name.	No. of certificate.	Date of certificate.	Remarks.
Prasad, Dharmanath	255	21st April 1937.	
McCue, Neil Bertram	256	Ditto.	
Roy, Pratul Kumar	257	Ditto.	
Yasin, Mohammad	258	Ditto.	
Datta, Anilendra Nath	259	Ditto.	
Gupta, Pramod Chandra	260	Ditto.	
Mitra, Durga Prasanna	261	Ditto.	

APPENDIX IV—*contd*

Miscellaneous—*contd.*

Statement No 2—*contd.*

Names of persons to whom first and second class coal mine managers' certificates of competency and surveyors' certificates of competency were granted during the year 1937—*contd*

INDIAN CERTIFICATES—*contd*

(*b*) SECOND CLASS

Name	No of certificate	Date of certificate	REMARKS
Mukherjee Chandra Sekha	5 0	21st April 1937	
Sr nivasan Govindswami	531	Ditto.	
Krishnan Subbuswami Iyer Gopala	533	Ditto.	
Chatterjee Hemendra Nath	533	Ditto	
Rogers Clarence Arnold Joseph	534	Ditto	
Bhatt Hemant Kumar Krishnaprasad	535	Ditto	
Ghosh Bikash Chandra	536	Ditto	
Tayab Mohammed	537	Ditto	
Ghose Hari Charan	538	Ditto	
Ghose Hiran Kumar	539	Ditto	
Chowdhury Nagendra Mohan	540	Ditto	
Burman Kartico Chandra	541	Ditto	
Adhikary Bhupendra Nath	542	Ditto	
Maity Nilmoni	543	Ditto	
Verma, Achyuta Nand	44	Ditto	
Roy Bibhuti Bhusan	545	Ditto	
Bizy Saiyad Riyazul Hasan	546	Ditto	
Paul Manmatha Nath	547	Ditto	
Dutt Sudhanshu Kumar	548	Ditto	
Ghatak, Hari Pada	549	Ditto	
Gandhar Ladli Prasad	550	Ditto	
Banerjee Ajit Kumar	551	Ditto	

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 4—*contd.*

(ii)—*contd.*

81. Manpur	Seth Isser Dass	Manpure	Gaya	Gaya.
82. Manpur	Azimuddin Basant Lal	Do	Do.	Do.
83. Pirpahar	Bengal and North-Western Railway.	Sukhurpur	Monghyr	Monghyr.
84. Girhinda	Melaram and Basantlal	Girhinda	Do.	Do.
85 Bodma	A. V. Sam	Bodma	Jamtara	Santhal Parganas.
86. Tinpahar	Chatterjee Shaw & Co.	Tinpahar	Rajmahal	Do.
87. Maharajpur (locally known as Sahibganj Block No. 1).	Birendra Nath Shah	Matijharna	Do.	Do.
88. Tinpahar	Seth Teomal	Tinpahar	Do.	Do."

(iii) For the sub-head "Fireclay Mine" and the entry thereunder the following sub-head and entries shall be substituted, namely :—

"*Fireclay Mine.*"

"1. Merrah	Bengal Coal Co., Ld.	Merrah	...	Manbhum.
2. Sangomohal	Bihar Firebricks & Potteries, Ld.	Sangomohal	Dhanbad	Do.
3. Chatabar	Do.	Chatabar	Do.	Do.
4. Raugamati	Burn & Co., Ld.	Raugamati	Do.	Do.
5. Gulfarbari	Do.	Gulfarbari	Do.	Do.
6. Mugma Birsingpur.	D N. Chowdhury	Mugma Birsingpur.	Do.	Do.
7. Kapasara	Amir Ahmed Khan	Kapasara	Do.	Do.
8. Palasia	Alladad Khan	Palasia	Do.	Do.
9. Jograd	Dina Nath Gorai	Jograd	Do.	Do.
10. Kethardih	Haripada Goswami	Kethardih	Do.	Do."

III.—Under the head "(Bombay Presidency)", to the entries under the sub-head "Stone Mines" the following entries shall be added, namely :—

"31. Tamdi Khan	Lal Khan Imambhai	Tamdi	F. Ward	Town and Island of Bombay.
32. Sowree	Bhagat Sing Naji	Sowree	Do.	Do.
33. Tambdi Khan	Rasid Banoo Savakshaw Kapadia.	Do.	Do.	Do.
24. Tambdi Khan	Soloman M. Haskell	Do.	Do.	Do.

Miscellaneous—*contd*

Statement No. 4—*contd.*

IV —Under the head "(Burma)"

(i) For the sub head "Limestone Mine" the following sub head shall be substituted, namely —

"*Limestone Mines*",

(ii) to the entries under the said sub head the following entry shall be added, namely —

"5 Kung tong	Burma Corporation, Ld.	Mila 26 9 Kung-tong	Lashio	North Hsenwi State (Northern Shan States)"	

V —To the entries under the head "(Central Provinces) the following sub head and entries shal be added, namely —

"*Bauxite Mines*",

"1 Tikuri	K. P Pandey	Tikuri	Murwara	Jubbulpur
2 Tikuri	C L Pathak & Sons	Do	Do	Do

VI —Under the head "(Madras Presidency)".

(i) Under the sub head "Stone Mines" for entries 16 and 17 the following entries shall be substituted, namely —

"16 Molagupparai	Military Department	Trichinopoly Town	Trichinopoly	Trichinopoly
17 Mogalrajpuram	Government of Madras, Works Department	Mogalrajpuram	Bezwada Taluk	Kista
18 Pakkam	South Indian Railway	Pakkam	Madurantakam Taluk	Chingleput.

(ii) Under the sub head "Barytes Mines" —

(a) in the second column for the word "Kothapalli the following shall be substituted namely —

"*Kothapalli S No 238*",

(b) after entry 3 the following shall be inserted namely —

"4 Vemula (S No 981-5-978 and 979	A Krishnappa and Sons	Vemula	Palayandla Taluk	Cuddapah
5 Nondipalli	Do	Kothapalli (S No 517 2 and 517-3)	Do	

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 4—*concld.*

6. Vemula (S. No. 981-4).	Tiffin & Co.	Vemula	Palivondla Taluk.	Cuddapah.
7. Vemula (S. No. 1021).	Do.	Do.	Do.	Do."

"*Limestone Mine*";

"1. Madukharai	Coimbatore Cement Co., Ld.	Madukharai	Coimbatore	Coimbatore."

VII.—Under the head "Punjab" to the entries under the sub-head "Stone Mine" the following entry shall be added, namely:—

"6. Gharibwal (Jutana North Western Railway quarry).		Jutana	Pind Dadan Khan.	Jhelum."

VIII.—Under the head "(United Provinces)".

(i) For the sub-head "Stone Mines" the following sub-head shall be substituted, namely:—

"*Stone Mines*";

(ii) to the entry under the said sub-head the following entries shall be added, namely:—

"2. Shankergarh	Sheikh Hidayatullah	Tala	Allahabad	Allahabad.
3. Shankergarh	Jethanand	Do.	Do.	Do.
4. Shankergarh	Govindram Sindhi	Benipur	Do.	Do.
5. Shankergarh	Pars Ram	Shankergarh	Do.	Do.
6. Hajitola (Shankergarh).	Govindram Sindhi	Hajitola	Do.	Do.
7. Lakhanpur (Shankergarh).	L. P. Pandey & Sons	Lakhanpur	Do.	Do.
8. Kulmajra	Pars Ram	Kulmajra	Maw	Banda.
9. Kulmajra	Bhagwandin	Do.	Do.	Do.
10. Sheora	Nazir Hussain	Gulpura	Jhansi-Math	Jhansi.
11. Sheora	Ram Harak	Do.	Do.	Do.
12. Sheora	Ram Charan and Ram Gopal.	Tari	Do.	Do.
13. Sheora	Debi Sahai and Kali Charan.	Do.	Do.	Do.
14. Sheora	Murlidhar and Tek Chand.	Do.	Do.	Do.
15. Chandpur Jahazpur.	Randhir Singh	Chandpur Jahazpur.	Lalitpur	Do.
16. Chandpur Jahazpur.	Shiam Lal Tara Chand & Co.	Jhilgawan	Do.	Do."

APPENDIX IV—*contd.*

Miscellaneous—*contd*

Statement No. 5.

NOTIFICATION.

New Delhi, the 20th January 1937

No. M-966.—In exercise of the powers conferred by sections 29 and 131A of the Indian Mines Act, 1923 (IV of 1923), the Governor General in Council is pleased to make the following further temporary regulations, having satisfied himself that for the prevention of danger or the speedy remedy of conditions likely to cause danger it is necessary to exempt the regulations to dispense with the delay that would result from the previous publication and reference to Mining Boards :—

Temporary Regulations for Coal Mines.

1. (1) These regulations may be cited as the Coal Mines (Temporary [illegible] 1937.

(2) They shall apply only in respect of coal mines.

2. In these regulations, "the principal Regulations" [illegible] Mines Regulations, 1926.

3. (1) The first inspection of a mine or part of a mine [illegible] of a type [illegible]

(2) No additional lamp shall be used in any such inspection [illegible] lamp of a type approved by the Chief Inspector.

(3) The result of every such inspection shall be reported [illegible] be matter required by sub-regulation (2) of regulation 70 of the principal [illegible] be recorded in the book maintained in accordance with sub-regulation [illegible] the principal Regulations.

4. The principal Regulations shall be read as if [illegible] of regulation 7[illegible] the following sub-regulation were [illegible] :—

"(4) The inspection shall be made with a safety lamp of a type approved by the Chief Inspector, and no other lamp shall be used other than an electric safety lamp of a type approved by the Chief Inspector.

Provided that in the case of a mine in which [illegible] has never been found and is unlikely to be found, an exemption may be made with a [illegible] lamp [illegible] in conjunction with an open light or a safety lamp."

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 6.

NOTIFICATION.

New Delhi, the 1st February 1937.

No. M.-1055.—In exercise of the powers conferred by section 29 of the Indian Mines Act, 1923 (IV of 1923), the Governor General in Council is pleased to make the following regulations, which have been previously published as required by sub-section (*1*) of section 31 of the said Act, namely :—

Regulations for prohibiting the employment of women underground in mines.

1. On or after the 1st day of July 1937, no woman shall be permitted to enter for purposes of employment, or be employed in, the underground workings of any mine.

Explanation.—" Underground workings " means any part of a mine situated beneath the superjacent ground, and includes vertical shafts provided for access to, or for the ventilation of such part; but does not include tunnels made and used only for convenience in disposing of spoil.

2. Regulation 1 shall not apply to women employed in health and welfare services.

3. No woman shall be permitted to enter or remain in the underground workings of any mine unless she is in possession of a pass granted by the manager of the mine.

4. Before a woman enters a mine with a pass granted under regulation 3, her name, address and occupation shall be entered in a register maintained for this purpose at the surface of the mine, and her exit from the mine shall also be recorded in that register.

Provided that in any mine to which sub-section (*4*) of section 28 of the Indian Mines Act, 1923 (IV of 1923), has been declared to be applicable, the entries required by this regulation may be made in the register prescribed by that sub-section.

Statement No. 7.

NOTIFICATION.

New Delhi, the 25th February 1937.

No. M.-1055.—In exercise of the powers conferred by sub-section (*1*) of section 46 of the Indian Mines Act, 1923 (IV of 1923), the Governor General in Council is pleased to direct that the following further amendments shall be made in the Schedule to the notification of the Government of India in the Department of Industries and Labour, No. M.-1051, dated the 1st October 1935, namely :—

In the said Schedule—

I. In column 3 against entry 1, after condition (2) the following condition shall be inserted, namely :—

" (3) The owner, agent or manager of any mine so exempted shall not permit any female to enter for purposes of employment, or be employed in the underground workings, if any, of the mine."

II. In column 3 against entries 4 and 9 the following condition shall be inserted, namely :—

" The owner, agent or manager of any mine so exempted shall not permit any female to enter for purposes of employment, or be employed in the underground workings, if any, of the mine."

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 8.

The 13th March 1937.

No. 453—VIIM-7/37-Com.—In exercise of the powers conferred by clause (*a*) of section 30 of the Indian Mines Act, 1923 (IV of 1923), the Government of Bihar are pleased to make the following rules —

A —Mining Board for Coal Mines

1 Of the two members to be nominated under section 10(1)(*d*) —

(*a*) One shall be nominated by the Indian Mining Association, and

(*b*) One shall be nominated as the result of an election held by an electoral college consisting of the members of the Indian Mining Federation and the Indian Colliery Owners' Association At such election no member of the electoral college shall have more than one vote

2 Two members shall be nominated under section 10(1)(*e*), to represent the interest of miners, in the following manner —

(*a*) If the registered trade unions in the province of Bihar have in the aggregate as members not less than one quarter of the miners employed in the province, the said registered trade unions shall nominate two persons to represent the interest of miners

(*b*) If the registered trade unions in the province of Bihar have in the aggregate as members less than one quarter of the miners employed in the province, but not less than 1,000 the said registered trade unions shall nominate one person to represent the interest of the miners, and the local Government shall nominate the other person

(*c*) If the registered trade unions in the province have in the aggregate less than 1,000 members, the local Government shall nominate both persons

(*d*) If the registered trade unions are unable to agree as to what person or persons shall be nominated under part (*a*) or (*b*) of this rule, the local Government shall for each vacancy, call on one registered trade union to nominate a person in the following order —

(1) The Indian Colliery Labour Union,

(2) The Tata's Colliery Labour Association,

(3) The Indian Miners' Association,

and this rotation shall be observed for all subsequent vacancies

3 A person nominated under section 10 (1)(*d*) or 10(1)(*e*) shall hold office for a period of two years from the date of the notification appointing him to be a member of the Board

4 The Chairman of the Board shall be authorised to accept the resignation of any member who is unable or unwilling to serve on the Board

5 As soon as may be on the occurrence of a vacancy or before it, if possible the Chairman shall inform the local Government, so that the vacancy may be filled A retiring member shall be eligible for renomination.

6 *Absence from India* —

(i) Before a member of the Board leaves India,

(*a*) he shall intimate to the Chairman the date of his departure and the date of his expected return to India, and

(*b*) if he intends to be absent from India for a longer period than six months he shall tender his resignation to the Chairman

(ii) If any member leaves India without taking either of the courses mentioned in sub rule (i) he shall be deemed to have resigned, with effect from the date of his departure from India

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 6.

NOTIFICATION.

New Delhi, the 1st February 1937.

No. M.-1055.—In exercise of the powers conferred by section 29 of the Indian Mines Act, 1923 (IV of 1923), the Governor General in Council is pleased to make the following regulations, which have been previously published as required by sub-section (*1*) of section 31 of the said Act, namely :—

Regulations for prohibiting the employment of women underground in mines.

1. On or after the 1st day of July 1937, no woman shall be permitted to enter for purposes of employment, or be employed in, the underground workings of any mine.

Explanation.—" Underground workings " means any part of a mine situated beneath the superjacent ground, and includes vertical shafts provided for access to, or for the ventilation of such part; but does not include tunnels made and used only for convenience in disposing of spoil.

2. Regulation 1 shall not apply to women employed in health and welfare services.

3. No woman shall be permitted to enter or remain in the underground workings of any mine unless she is in possession of a pass granted by the manager of the mine.

4. Before a woman enters a mine with a pass granted under regulation 3, her name, address and occupation shall be entered in a register maintained for this purpose at the surface of the mine, and her exit from the mine shall also be recorded in that register.

Provided that in any mine to which sub-section (*4*) of section 28 of the Indian Mines Act, 1923 (IV of 1923), has been declared to be applicable, the entries required by this regulation may be made in the register prescribed by that sub-section.

Statement No. 7.

NOTIFICATION.

New Delhi, the 25th February 1937.

No. M.-1055.—In exercise of the powers conferred by sub-section (*1*) of section 46 of the Indian Mines Act, 1923 (IV of 1923), the Governor General in Council is pleased to direct that the following further amendments shall be made in the Schedule to the notification of the Government of India in the Department of Industries and Labour, No. M.-1051, dated the 1st October 1935, namely :—

In the said Schedule—

I. In column 3 against entry 1, after condition (2) the following condition shall be inserted, namely :—

" (3) The owner, agent or manager of any mine so exempted shall not p[illegible] to enter for purposes of employment, or be employed in the un[illegible] ings if any, of the mine."

II. In column 3 against entries 4 and 9 the following condition shall be in[illegible]

" The owner, agent or manager of any mine so exempted shall not [illegible] ter for purposes of employment, or be employed in the undergrou[illegible] the mine."

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 8.

The 13th March 1937.

No. 453—VIIM-7/37-Com.—In exercise of the powers conferred by clause (*a*) of section 30 of the Indian Mines Act, 1923 (IV of 1923), the Government of Bihar are pleased to make the following rules :—

A.—Mining Board for Coal Mines

1 Of the two members to be nominated under section 10(1)(*d*) —

(*a*) One shall be nominated by the Indian Mining Association, and

(*b*) One shall be nominated as the result of an election held by an electoral college consisting of the members of the Indian Mining Federation and the Indian Colliery Owners' Association At such election no member of the electoral college shall have more than one vote

2 Two members shall be nominated under section 10(1)(*e*), to represent the interest of miners, in the following manner —

(*a*) If the registered trade unions in the province of Bihar have in the aggregate as members not less than one quarter of the miners employed in the province, the said registered trade unions shall nominate two persons to represent the interest of miners

(*b*) If the registered trade unions in the province of Bihar have in the aggregate as members less than one quarter of the miners employed in the province, but not less than 1,000 the said registered trade unions shall nominate one person to represent the interest of the miners, and the local Government shall nominate the other person

(*c*) If the registered trade unions in the province have in the aggregate less than 1,000 members, the local Government shall nominate both persons

(*d*) If the registered trade unions are unable to agree as to what person or persons shall be nominated under part (*a*) or (*b*) of this rule, the local Government shall for each vacancy, call on one registered trade union to nominate a person in the following order —

(1) The Indian Colliery Labour Union,

(2) The Tata's Colliery Labour Association,

(3) The Indian Miners' Association,

and this rotation shall be observed for all subsequent vacancies

3 A person nominated under section 10 (1)(*d*) or 10(1)(*e*) shall hold office for a period of two years from the date of the notification appointing him to be a member of the Board

4 The Chairman of the Board shall be authorised to accept the resignation of any member who is unable or unwilling to serve on the Board

5 As soon as may be on the occurrence of a vacancy or before it, if possible the Chairman shall inform the local Government, so that the vacancy may be filled A retiring member shall be eligible for renomination

6 *Absence from India* —

(i) Before a member of the Board leaves India

(*a*) he shall intimate to the Chairman the date of his departure and the date of his expected return to India, and

(*b*) if he intends to be absent from India for a longer period than six months he shall tender his resignation to the Chairman

(ii) If any member leaves India without taking either of the courses mentioned in sub rule (i) he shall be deemed to have resigned, with effect from the date of his departure from India

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 8—*contd.*

7. The Board shall meet at such places and at such times as may be appointed by the Chairman.

8. The Secretary shall conduct all the correspondence of Board, keep its accounts and record the proceedings of each meeting in a minute book, kept for permanent record. The record shall be signed by the Chairman.

9. The Secretary shall give due notice to the members of the Mining Board of the date fixed for each meeting, and shall furnish each with the agenda of the business to be discussed.

10. A quorum of the Board shall consist of—

(*a*) the Chairman;

(*b*) the Chief Inspector or an Inspector of Mines appointed under section 10(1)(*b*);

(*c*) one person nominated under section 10(1)(*d*);

(*d*) one person nominated under section 10(1)(*e*).

11. All questions or matters referred to the Board shall be decided by a majority of the votes of the members present.

12. The Chairman of the Board shall have a deliberative vote, and shall also in the case of an equal division have a casting vote.

13. Any member disagreeing with a decision of the Board may enter a note of dissent which shall form part of the record of the proceedings.

14. The Board shall have the power of consulting with such person or persons as they may in their discretion desire to consult.

15. It shall be open to the parties to any reference before the Board to appear at the hearing either in person or by solicitor or counsel or agent.

16. Unless otherwise directed by the Chairman the proceedings of the Board shall be held in private.

B.—Mining Board for Mines other than Coal Mines.

1. Of the two members to be nominated under section 10(1)(*d*):—

(*a*) One shall be nominated by the Indian Mining Association, and

(*b*) One shall be nominated as the result of an election held by an electoral college consisting of the members of the Indian Mining Federation and the Indian Colliery Owners' Association. At such election no member of the electoral college shall have more than one vote.

2. Two members shall be nominated under section 10(1)(*e*), to represent the interest of miners, in the following manner:—

(*a*) If the registered trade unions in the province of Bihar have in the aggregate as members not less than one quarter of the miners employed in the province, the said registered trade unions shall nominate two persons to represent the interest of miners.

(*b*) If the registered trade unions in the province of Bihar have in the aggregate as members less than one quarter of the miners employed in the province, but not less than 1,000 the said registered trade unions shall nominate one person to represent the interest of the miners and the local Government shall nominate the other person.

(*c*) If the registered trade unions in the province have in the aggregate less than 1,000 members the local Government shall nominate both persons.

(*d*) If there are two or more registered trade unions, and they are unable to agree as to what person or persons shall be nominated by them under part (*a*) or (*b*) of this rule, the local Government shall call on each registered trade union in turn to nominate a person to fill a vacancy, and the local Government shall decide the order in which such trade unions shall be placed for this purpose, and shall inform the trade unions concerned of such decision.

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No 8—*concld*

3 A person nominated under section 10(f)(d) or 10(f)(e) shall hold office for a period of two years from the date of the notification appointing him to be a member of the Board

4 The Chairman of the Board shall be authorised to accept the resignation of any member who is unable or unwilling to serve on the Board

5 As soon as may be on the occurrence of a vacancy or before it, if possible, the Chairman shall inform the local Government, so that the vacancy may be filled A retiring member shall be eligible for renomination

6 *Absence from India* —

(i) Before a member of the Board leaves India—

(a) he shall intimate to the Chairman the date of his departure and the date of his expected return to India, and

(b) if he intends to be absent from India for a longer period than six months, he shall tender his resignation to the Chairman

(ii) If any member leaves India without taking either of the courses mentioned in sub rule (i), he shall be deemed to have resigned with effect from the date of his departure from India

7 The Board shall meet at such places and at such times as may be appointed by the Chairman

8 The Secretary shall conduct all the correspondence of the Board keep its accounts and record the proceedings of each meeting in a minute book, kept for permanent record The record shall be signed by the Chairman

9 The Secretary shall give due notice to the members of the Mining Board of the date fixed for each meeting, and shall furnish each with the agenda of the business to be discussed

10 A quorum of the Board shall consist of—

(a) the Chairman,

(b) the Chief Inspector or an Inspector of Mines appointed under section 10(1)(b)

(c) one person nominated under section 10(1)(d),

(d) one person nominated under section 10(1)(e)

11 All questions or matters referred to the Board shall be decided by a majority of the votes of the members present

12 The Chairman of the Board shall have a deliberative vote and shall also in the case of an equal division have a casting vote

13 Any member disagreeing with a decision of the Board may enter a note of dissent which shall form part of the proceedings

14 The Board shall have the power of consulting with such person or persons as they may in their discretion desire to consult

15 It shall be open to the parties to any reference before the Board to appear at the hearing either in person or by solicitor or counsel or agent

16 Unless otherwise directed by the Chairman, the proceedings of the Board shall be held in private

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No 8—*concld*

3 A person nominated under section 10(1)(d) or 10(1)(e) shall hold office for a period of two years from the date of the notification appointing him to be a member of the Board

4 The Chairman of the Board shall be authorised to accept the resignation of any member who is unable or unwilling to serve on the Board

5 As soon as may be on the occurrence of a vacancy or before it, if possible, the Chairman shall inform the local Government, so that the vacancy may be filled A retiring member shall be eligible for renomination

6 *Absence from India* —

(i) Before a member of the Board leaves India—

(a) he shall intimate to the Chairman the date of his departure and the date of his expected return to India, and

(b) if he intends to be absent from India for a longer period than six months, he shall tender his resignation to the Chairman

(ii) If any member leaves India without taking either of the courses mentioned in sub rule (i), he shall be deemed to have resigned with effect from the date of his departure from India.

7 The Board shall meet at such places and at such times as may be appointed by the Chairman

8 The Secretary shall conduct all the correspondence of the Board, keep its accounts and record the proceedings of each meeting in a minute book kept for permanent record The record shall be signed by the Chairman

9 The Secretary shall give due notice to the members of the Mining Board of the date fixed for each meeting, and shall furnish each with the agenda of the business to be discussed

10 A quorum of the Board shall consist of—

(a) the Chairman,

(b) the Chief Inspector or an Inspector of Mines appointed under section 10(1)(b),

(c) one person nominated under section 10(1)(d),

(d) one person nominated under section 10(1)(e)

11 All questions or matters referred to the Board shall be decided by a majority of the votes of the members present

12 The Chairman of the Board shall have a deliberative vote and shall also in the case of an equal division have a casting vote

13 Any member disagreeing with a decision of the Board may enter a note of dissent which shall form part of the proceedings

14 The Board shall have the power of consulting with such person or persons as they may in their discretion desire to consult

15 It shall be open to the parties to any reference before the Board to appear at the hearing either in person or by solicitor or counsel or agent

16 Unless otherwise directed by the Chairman, the proceedings of the Board shall be held in private

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 9.

NOTIFICATION.

Simla, the 17th June 1937.

No. M.-1055.—In exercise of the powers conferred by section 46 of the Indian Mines Act, 1923 (IV of 1923), the Central Government are pleased to exempt for a period of three months from 1st July 1937 all coal mines in Bengal, Bihar, the Central Provinces and Orissa from the Provisions of clause (*j*) of section 29 of the said Act, to the extent to which regulations made thereunder prohibit the entry of women into underground workings for purposes of employment. This exemption is subject to the condition that the total number of women employed in the undergound workings of any mine on any day shall not exceed 5 per cent. of the total number of persons so employed.

Statement No. 10.

NOTIFICATION.

Simla, the 10th July 1937.

No. M.-966.—In exercise of the powers conferred by sections 29 and 31A of the Indian Mines Act, 1923 (IV of 1923), the Central Government is pleased to make the following further temporary regulations, being satisfied that for the prevention of apprehended danger or the speedy remedy of conditions likely to cause danger it is necessary in making these regulations to dispense with the delay that would result from their previous publication and reference to Mining Boards:—

Temporary Regulations for Coal Mines.

1. (*1*) These regulations may be called the Supplementary Coal Mines (Temporary) Regulations, 1937.

(*2*) They shall apply only in respect of coal mines.

2. In these regulations, "the principal Regulations" mean the Indian Coal Mines Regulation, 1926.

3. (*1*) The Chief Inspector may require the manager of any mine in which, or in any part of which, a mechanical ventilator is in use, to submit within one month Standing Orders specifying the action that shall be taken with respect to the withdrawal of workmen from such mine or such part of the mine in the event of a stoppage of the mechanical ventilator.

(*2*) The Chief Inspector may approve of such Standing Orders or may modify them if, in his opinion, they are defective in any respect, and shall give notice in writing to the manager that such Standing Orders as are approved by him shall be enforced at the mine.

(*3*) On receipt of the notice from the Chief Inspector the manager shall post the Standing Orders in conspicuous places at the mine both above and below ground and shall be responsible for securing effective compliance with them.

4. (*1*) In any mine in which inflammable gas has been found during the previous twelve months, all unused workings in which inflammable gas may accumulate and which are not permanently sealed off, shall, at least once in every week, be inspected for the presence of inflammable gas, by the competent person appointed under regulation 70 of the principal Regulations.

(*2*) The inspection shall be made with a locked flame safety lamp of a type approved by the Chief Inspector, and no additional light shall be used, other than an electric torch or lamp of a type approved by the Chief Inspector.

(*3*) The result of every such inspection shall be reported by the person making it in the manner required by sub-regulation (*5*) of regulation 70 of the principal Regulations and shall be recorded in the book maintained in accordance with sub-regulation (*2*) of that regulation.

(*4*) Nothing in this regulation shall be construed to affect the provisions of regulation 70 of the principal Regulations.

APPENDIX IV—*contd*

Miscellaneous—*contd.*

Statement No. 10—*contd*

(2) The person conducting the search shall —

(a) search or turn out all pockets,

(b) pass his hand over all clothing, and

(c) examine any article in the workman's possession

possession

ulations the of the said manager for every well,

(2) If any lamp is found to be defective, it shall not be reissued for use until the defect has been remedied

7 (1) A competent person appointed in writing by the manager for the purpose shall examine every safety lamp on its being returned, after use underground

(2) If on such examination any lamp is found to be damaged or misused he shall record the nature of the damage or misuse in a book to be kept at the mine for the purpose, and every new entry in the book shall be shown to the manager without delay

8 The principal Regulations shall be read as if for clause (b) of regulation 127 the following clause were substituted, namely —

"(b) (i) A competent person appointed in writing by the manager for the purpose shall examine every safety lamp at the surface immediately before it is taken underground for use and shall assure himself, as far as practicable, from external observation that each lamp is in safe working order and securely locked

(ii) The competent person referred to in sub clause (i) shall not be the banksman except in a mine where the number of persons employed underground is not more than 50 at any one time

Statement No. 11.

PRESS *COMMUNIQUÉ*

Simla, the 10th September 1937.

Regulations under the Ind complete exclusion of women from e intended to come into effect f coal mines in Bengal Bihar, ded to grant no further exten e 1st of October

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 12.

NOTIFICATION.

Nagpur, the 25th January 1937.

No. 227-3314-XIII of 36.—In exercise of the powers conferred by section 30 of the Indian Mines Act, 1923 (IV of 1923), as subsequently amended, the Governor in Council is pleased to make the following amendments to the Central Provinces Regulation and Inspection of Mines Rules, 1924, published under the Central Provinces Gazette Notification No. 2226-1820-XIII, dated the 24th September 1924 (as subsequently amended) :—

Amendments.

1. For rule 3, the following rule shall be substituted, namely :—

"3. The persons nominated under section 10 (1) (*c*), section 10 (1) (*c*) (ii) and section 10 (1) (*e*) (iii) shall be such persons as the Local Government may select.

2. For rule 5 the following rule shall be substituted, namely :—

"5. A person nominated under section 10 (1) (*c*), section 10 (1) (*d*) or section 10 (1) (*e*) shall hold office for a term of three years from the date of the notification appointing him as a member of the Board :

Provided that an outgoing member shall continue in office until the appointment of his successors is notified ; and

Provided further that the Local Government may, by notification, at any time terminate the term of office of a person nominated by it as a member of the Board under the provisions of section 10 (1) (*c*) in order to replace him by a person nominated by a trade union or trade unions in the prescribed manner under the said provisions."

3. In the heading of Chapter II, for the words "Court of Inquiry", the words "Accidents and Court of Inquiry", and for the word, figures and letter "section 30 (*b*)", the words, figures and letters "section 30 (*aa*) and (*b*)" shall be substituted.

4. In Chapter II, the following rule shall be inserted as rule 19, and present rules 19 and 19-A shall be renumbered as rules 19-A and 19-B, respectively : –

"19. If the Local Government has, by notification, directed that accidents of the kind referred to in section 20 (2) occurring in or about any mines shall be entered in a register, the same shall be entered in a register to be maintained in Form G called the Register of Minor Accidents :

Provided that this rule shall not apply to accidents involving any injury which does not result in the enforced absence from work of the person injured for a period exceeding seven days."

5. In the heading under Chapter V for the words, figures and letters "section 30 (*cc*), (*d*), (*f*) and (*k*)" the words, figures and letters "section 30 (*cc*), (*d*), (*e*), (*ee*), (*f*) and (*k*)" shall be substituted.

6. For rule 29, the following revised rule shall be substituted, namely :—

"29. The register of all persons employed in the mine prescribed by section 28 (1) shall be maintained in Form A-1 at the office of the mine. It shall show all changes, excluding merely temporary or casual changes, in the nature of employment of each person."

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No 12—*contd*

NOTIFICATION—*contd.*

Nagpur, the 25th January 1937—contd

7. After rule 29 B, the following new rule shall be inserted, namely —

"29-C For every mine to which the provisions of section 28 (4) are applied by the Local Government by general or special order, there shall be kept at the office of the mine a register in Form A 2 of persons working below ground in the mine

8 After rule 31, the following rule shall be inserted namely

"31 A Before any person who has not completed his seventeenth year is employed underground, the manager shall arrange to have him examined by a qualified medical practitioner and if after examination the medical practitioner is of opinion that such person is fit for employment underground, he shall grant him a certificate in Form H

31 B (1) Every certificate granted by a qualified medical practitioner shall be prepared by filling up the foil and counterfoil on both of which shall be impressed the left thumb mark of the person in whose name the certificate is granted

(2) The qualified medical practitioner shall when satisfied as to the correctness of the entries made therein, sign the foil and initial the counterfoil and shall deliver the foil to the manager for safe custody.

(3) No certificate granted under rule 31 A shall be valid for a period exceeding twelve months Every person in respect of whom a certificate of fitness has been issued shall be re examined within twelve months of the last previous examination unless in the mean time he has completed his seventeenth year and the qualified medical practitioner making such re examination may renew the certificate for a further period not exceeding twelve months or may suspend or revoke the said certificate

(4) A qualified medical practitioner who refuses to grant a certificate referred to in rule 31 A or

(5) Every person who has been certified as fit for employment underground shall before he is so employed be provided by the manager with a metal token Such token shall be stamped with the letter "P" and numbered The number shall be the same as that of the certificate of fitness

(6) A record of every token so issued and the person to whom it was issued shall be maintained in the office of the mine

(7) Certificates prescribed by clause (a) of section 26 A may be granted by a mine medical officer who is declared to be a qualified medical practitioner'

9 For the existing forms "A 1, A 2, E and I the accompanying revised forms 'A 1, A 2, E and F" shall be substituted

10 After form "F" the accompanying forms "G and H" shall be inserted

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 12—*contd.*

FORM A-1.

(RULE 29.)

Register of work-persons employed in mines (both on surface and underground). [*Sections 28 (1) and 30 (f) and (h) of the Indian Mines Act, 1923, as amended.*]

Name of mine.....

Name of owner.....

Serial No.	Name of worker with father's name and caste.	Age.	Sex.	Nature of his employment.	Periods of work fixed for him.		Intervals of rest, if any, to which he is entitled.		The days of rest to which he is entitled.
					Begins a.m. p.m.	Ends a.m. p.m.	Begins a.m. p.m.	Ends a.m. p.m.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

APPENDIX IV—*contd*

Miscellaneous—*contd.*

Statement No. 12—*contd*

FORM A 2

(Rule 21 (C))

Register of persons working below ground in respect of all coal mines and other mines having underground workings, to which provisions of section 28 (1) of the Indian Mines Act have been made applicable by a general or special order of the Local Government

(Persons entering the mine shall be shown by a × in the column marked "In" against the name.)

(Persons leaving the mine shall be shown by a in the column marked "Out" against the name.)

(All entries shall be made in ink)

Period of work commences at p.m./a.m.

Period of work ends at p.m./a.m.

For week commencing and ending

Serial No. of form A I	Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out

Total number of persons underground—

Total number of women underground—

Percentage of persons below ground who are women—

Signature of Register Keeper

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 12—*contd.*

FORM E.

(RULE 29-B FOR MINES WITH NO RELAY SYSTEM.)

Notice of commencement of work, commencement of rest interval, end of rest interval and end of work as required by section 23-B (1) of the Indian Mines Act.

Name of mine.....

Name of owner of mine.....

It is hereby notified that persons employed in this mine shall begin their work, take rest intervals and end their work at the hours set out below —

Kind of worker.	Beginning of work.	Commencement of rest interval.	End of rest interval.	End of work.

Miscellaneous—*contd*

Statement No. 12—*contd*

FORM F.

(RULE 20 B FOR MINES WORKED BY A SYSTEM OF RELAYS.)

Notice of commencement of work, commencement of rest interval, end of rest interval and end of work.

Name of mine _____

Name of owner of mine _____

It is hereby notified that persons employed in this mine shall begin their relays of work, take rest intervals and end their relays of work between the hours set out below:—

First relay.				Second relay.				Third relay.			
Beginning of relay.	Commencement of rest interval	End of rest interval.	End of relay.	Beginning of relay.	Commencement of rest interval	End of rest interval.	End of relay	Beginning of relay.	Commencement of rest interval	End of rest interval	End of relay.
A M P M	A M. P M	A M P M	A M P M	A M P M	A M P M	A M P M	A M. P M	A M P M	A M P M	A M P M	A M. P M
A M P M	A M P M	A M P M	A M P M	A M P M	A M P M	A M P M	A M P M	A M P M	A M P M	A M P M	A M P M
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 12—*contd*

FORM G.

Register of minor accidents in coal mines only. [Sections 29 (2) and 30 (aa) of the Indian Mines Act and rule 19 of the Central Provinces Regulation and Inspection of Mines Rules, 1921, as amended.]

Name of mine —

Date of the entry.	Date of the accident.	Name of the person injured.	Nature of work.	Nature of injury.	Nature of accident.	Duration of enforced absence from work.	Signature of Manager.
1	2	3	4	5	6	7	8

NOTE.—A copy of the entries should be sent by the owner, agent or manager of the mine within fourteen days after 30th June and 31st December in each year to the Chief Inspector of Mines in India, Dhanbad.

APPENDIX IV—*contd*

Miscellaneous—*contd*

Statement No. 12—*concld*

FORM II

[RULE 13 V]

Certificate of fitness to work

1 Serial No. _____

2 Date _____

3 Name _____

4 Father's name _____

5 Sex and caste or religion _____

6 Residence _____

7 Age _____

8 Physical fitness _____

9 Distinction of marks _____

10 Reasons for—

(a) Refusal of certificate _____

(b) Certificate being revoked _____

Left hand thumb impression

Initial of the qualified medical practitioner

NOTE—Exact details of cause of physical disability should be clearly stated.

Serial No _____

Date _____

I hereby certify that I have personally examined (name) _____

son / daughter of _____

caste _____

resident of _____

who is desirous of being employed in a mine and that his / her age as nearly as can be ascertained from my examination is _____ years and that he / she is fit for employment in a mine. His / Her distinguishing marks are _____

Left hand thumb impression

Signature and designation of the qualified medical practitioner

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 13.

NOTIFICATION.

Nagpur, the 25th January 1937.

No. 228-3314-XIII of 36.—In exercise of the powers conferred by section 30 of the Indian Mines Act, 1923 (IV of 1923), as applied to Berar, as subsequently amended, the Governor in Council is pleased to make the following amendments to the Berar Regulation and Inspection of Mines Rules, 1924, published with the Central Provinces Gazette Notification No. 2227-1820-XIII, dated the 24th September 1924 (as subsequently amended):—

Amendments.

1. In the headings of Chapter I, for the words "Court of Inquiry", the words "Accidents and Court of Inquiry", and for the word, figures and letter "section 30(*b*)", the words, figures and letters "section 30(*aa*) and (*b*)" shall be substituted.

2. In Chapter I the following rule shall be inserted as rule 1, and present rules 1 and 1-A shall be renumbered as rules 1-A and 1-B, respectively:—

"1. If the Local Government has, by notification, directed that accidents of the kind referred to in section 20(2) occurring in or about any mines shall be entered in a register, the same shall be entered in a register to be maintained in Form G called the Register of Minor Accidents:

Provided that this rule shall not apply to accidents involving any injury which does not result in the enforced absence from work of the person injured for a period exceeding seven days".

3. In the heading under Chapter IV for the words, figures and letters "section 30(*cc*), (*d*), (*f*) and (*k*)" the words, figures and letters "section 30(*cc*), (*d*), (*e*), (*ee*), (*f*) and (*k*)" shall be substituted.

4. For rule 11, the following revised rule shall be substituted, namely:—

"11. The register of all person employed in the mine prescribed by section 28(1) shall be maintained in Form A-1 at the office of the mine. It shall show all changes, excluding merely temporary or casual changes, in the nature of employment of each person".

5. After rule 11-B, the following new rule shall be inserted, namely:—

"11-C. For every mine to which the provisions of section 28(4) are applied by the Local Government by general or special order, there shall be kept at the office of the mine a register in Form A-2 of persons working below ground in the mine".

6. After rule 13, the following rules shall be inserted, namely:—

"13-A. Certificates prescribed by section 26-A of the Act shall be granted in Form H. The forms shall be kept in a bound book in foil and counterfoil and numbered consecutively.

13-B. Before any person who has not completed his seventeenth year is employed underground, the manager shall arrange to have him examined by a qualified medical practitioner and, if after examination the medical practitioner is of opinion that such person is fit for employment underground, he shall grant him a certificate in the Form in Schedule D.

13-C. (1) Every certificate granted by a qualified medical practitioner shall be prepared by filling up the foil and counterfoil on both of which shall be impressed the left thumb-mark of the person in whose name the certificate is granted.

APPENDIX IV—*contd*

Miscellaneous—*contd*

Statement No 13—*contd.*

NOTIFICATION—*contd*

Nagpur, the 20th January 1937—contd

(2) The qualified medical practitioner shall when satisfied as to the correctness of the entries made therein sign the foil and initial the counterfoil and shall deliver the foil to the manager for safe custody

(3) No certificate granted under rule 13 I shall be valid for a period exceeding twelve months Every person in respect of whom a certificate of fitness has been issued shall be re examined within twelve months of the last previous examination unless in the meantime he has completed his seventeenth year and the qualified medical practitioner [illegible] re examination may renew the certificate for a further period not exceeding [illegible] or may suspend or revoke the said certificate

(4) A qualified medical practitioner who refuses to grant a certificate referred to in rule 13 B or [illegible]

(5) Every person who has been certified as fit for employment underground shall before he is so employed be provided by the manager with a metal token Such token shall be stamped with the letter P and numbered The number shall be the same as that of the certificate of fitness.

(6) A record of every token so issued and the person to whom it was issued shall be maintained in the office of the mine

(7) Certificate prescribed by clause (i) of section 6 A may be granted by a medical officer who is declared to be a qualified medical practitioner

7 For the existing forms A1 A2 F and H the accompanying revised forms A1 A2 E and F shall be substituted

8 After form F the accompanying forms G and H shall be inserted

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 13—*contd.*

FORM A-1.

(RULE 11).

Register of work persons employed in mines (both on surface and underground) [sections 28(1) and 30(f) and (k) of the Indian Mines Act, 1923, as amended.]

Name of mine _____

Name of owner _____

Serial No.	Name of worker with father's name and caste.	Age.	Sex.	Nature of his employment.	Periods of work fixed for him.		Intervals of rest if any, to which he is entitled.		The days of rest to which he is entitled.
					Begins A.M./P.M.	Ends A.M./P.M.	Begins A.M./P.M.	Ends A.M./P.M.	
1	2	3	4	5	6	7	8	9	10

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement *No.* 13—*contd.*

FORM A 2.

(Rule 11 C)

Registering of persons working below ground in respect of all coal mines and other mines having under ground workings, to which provisions of section 28(4) of the Indian Mines Act, have been made applicable by a general or special order of the Local Government

(Persons entering the mine shall be shown by a × in the column marked "In" against the name)
(Persons leaving the mine shall be shown by a × in the column marked "Out" against the name)
(All entries shall be made in ink)

Period of work commences at $\frac{P.M.}{A.M.}$

Period of work ends at $\frac{P.M.}{A.M.}$

For week commencing and ending

Serial No of form A I	Sunday		Monday.		Tuesday		Wednesday		Thursday		Friday		Saturday.	
	In.	Out.	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out

Total number of persons underground—
Total number of women underground—
Percentage of persons below ground who are women—

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 13—*contd.*

FORM A-1.

(RULE 11).

Register of work persons employed in mines (both on surface and underground) [sections 28(1) and 30(f) and (k) of the Indian Mines Act, 1923, as amended.]

Name of mine_____

Name of owner_____

Serial No.	Name of worker with father's name and caste.	Age.	Sex.	Nature of his employment.	Periods of work fixed for him.		Intervals of rest if any, to which he is entitled.		The days of rest to which he is entitled.
					Begins A.M./P.M.	Ends A.M./P.M.	Begins A.M./P.M.	Ends A.M./P.M.	
1	2	3	4	5	6	7	8	9	10

APPENDIX IV—*contd*

Miscellaneous—*contd*

Statement No. 13—*contd*

FORM A 2

(Rule 11 C)

Registering of persons working below ground in respect of all coal mines and other mines having under ground workings, to which provisions of section 28(4) of the Indian Mines Act, have been made applicable by a general or special order of the Local Government

(Persons entering the mine shall be shown by a × in the column marked "In" against the name)
(Persons leaving the mine shall be shown by a × in the column marked "Out" against the name)
(All entries shall be made in ink)

Period of work commences at P M / A M

Period of work ends at P M / A M

For week commencing and ending

Serial No of form A I	Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out

Total number of persons underground—
Total number of women underground—
Percentage of persons below ground who are women—

Signature of Register Keeper

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 13—*contd.*

FORM E.

(RULE 11-B FOR MINES WITH NO RELAY SYSTEM).

Notice of commencement of work, commencement of rest interval, end of rest interval and end of work as required by section 23-B (1) of the Indian Mines Act.

Name of mine.....

Name of owner of mine.....

It is hereby notified that persons employed in this mine shall begin their work, take rest intervals and end their work at the hours set out below :—

Kind of worker.	Beginning of work.	Commencement of rest interval.	End of rest interval.	End of work.

APPENDIX IV—*contd*

Miscellaneous—*contd*

Statement No. 13—contd

FORM F

(WHEN WORK IS CARRIED ON BY A SYSTEM OF RELAYS)

Notice of commencement of work, commencement of rest interval, end of rest interval and end of work

Name of mine _____

Name of owner of mine _____

It is hereby notified that persons employed in the mine shall begin their relays of work, take rest intervals and end their relays of work between the hours noted below:—

First relay				Second relay				Third relay			
Beginning of relay	Commencement of rest interval	End of rest interval	End of relay	Beginning of relay	Commencement of rest interval	End of rest interval	End of relay	Beginning of relay	Commencement of rest interval	End of rest interval	End of relay
AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM
AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM.
AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM.

Note.—Here state the approximate yield of water that is to be taken from the time such persons leave the surface of the mine to the time when they finally return thereto at the end of relay work.

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 13—*contd.*

FORM G.

Register of minor accidents in coal mines only. [*Sections 20(2) and 30 (aa) of the Indian Mines Act and rule 11 of the Berar Regulation and Inspection of Mines Rules, 1924, as amended.*]

Name of mine.....

Date of the entry.	Date of the accident.	Name of the person injured.	Nature of work.	Nature of injury.	Nature of accident.	Duration of enforced absence from work.	Signature of manager.
1	2	3	4	5	6	7	8

NOTE.—A copy of the entries should be sent by the owner, agent or manager of the mine within fourteen days after 30th June and 31st December in each year to the Chief Inspector of Mines in India, Dhanbad.

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 13—*concld.*

FORM II

[RULE 13 A]

Certificate of fitness to work

1 Serial No _____

2 Date _____

3 Name _____

4 Father's name _____

5 Sex and caste or religion _____

6 Residence _____

7 Age _____

8. Physical fitness _____

9 Distinction of marks _____

10 Reasons for—

(a) Refusal of certificate _____

(b) Certificate being revoked _____

Left hand thumb impression.

Initial of the qualified medical practitioner

NOTE—Exact details of cause of phy
sical should be clearly stat

Serial No _____

Date _____

I hereby certify that I have personally examined (name) _____ son/daughter of _____ caste _____ resident of _____ who is desirous of being employed in a mine and that his/her age, as nearly as can be ascertained from my examination, is _____ years and that he/she is fit for employment in a mine. His/Her description marks are _____

Left

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 13—*contd.*

FORM G.

Register of minor accidents in coal mines only. [*Sections 20(2) and 30 (aa) of the Indian Mines Act and rule 11 of the Berar Regulation and Inspection of Mines Rules, 1924, as amended.*]

Name of mine.....

Date of the entry.	Date of the accident.	Name of the person injured.	Nature of work.	Nature of injury.	Nature of accident.	Duration of enforced absence from work.	Signature of manager.
1	2	3	4	5	6	7	8

NOTE.—A copy of the entries should be sent by the owner, agent or manager of the mine within fourteen days after 30th June and 31st December in each year to the Chief Inspector of Mines in India, Dhanbad.

APPENDIX IV—*contd.*

Miscellaneous—*contd*

Statement No. 13—*concld.*

FORM H

[RULE 13 A]

Certificate of fitness to work

1 Serial No _____

2 Date _____

3 Name _____

4 Father's name _____

5 Sex and caste or religion _____

6 Residence _____

7 Age _____

8 Physical fitness _____

9 Distinction of marks _____

10 Reasons for—

(a) Refusal of certificate _____

_____

(b) Certificate being revoked _____

_____

Left hand thumb impression.

Initial of the qualified medical practitioner

NOTE—Exact details of cause of physical disability should be clearly stated

Serial No _____

Date _____

I hereby certify that I have personally examined (name) _____

_____

son/daughter of _____

caste _____

resident of _____

_____

who is desirous of being employed in a mine and that his/her age as nearly as can be ascertained from my examination, is _____ years and that he/she is fit for employment in a mine. His/Her description marks are _____

_____

Left hand thumb impression

Signature of the qualified medical practitioner

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 14.

NOTIFICATION.

15th July 1937.

No. 5800—1 M-5/1937-Com.—In exercise of the powers conferred by section 30 of the Indian Mines Act, 1923 (IV of 1923), read with sub-paragraph (2) of paragraph 8 of the India and Burma (Transitory Provision) Order, 1937, the Government of Orissa are pleased to direct that the following amendments shall be made to the rules for coal mines and the rules for mines other than coal mines, published with Bihar and Orissa Government, Notification No. 2608 -VIIM-2-Com., dated the 8th September 1924, and which are in force in the areas transferred from the late Bihar and Orissa Province to the Province of Orissa :—

Amendments in the Rules for Coal Mines.

1. In Chapter III of the rules for coal mines—

(*a*) For rule 9, the following rule shall be substituted :—

9. The register of all persons employed in the mine shall be maintained, as required by sub-section (*1*) of section 28 of the Act, in the form shown in Schedule A. The register shall be kept at the office of the mine.

(*b*) For rule 9-A, the following rule shall be substituted :—

9-A. The register required by sub-section (*4*) of section 28 of the Act shall be maintained in the form shown in Schedule F and all entries therein shall be made at the entrance or entrances to the mine and at the time when the person against whose name the entries are made entered or left the mine. The register shall be kept at the entrance of the mine.

(*c*) After rule 11, the following rule shall be inserted as rule 11-A :—

11-A. The register of accidents referred to in sub-section (*2*) of section 20 of the Act shall be in the form shown in Schedule D.

2. After Chapter VI of the rules for coal mines, the following new Chapter VI-A shall be sorted and the rules in Chapter VII renumbered 30 to 34 : -

CHAPTER VI-A.

Certificate of fitness for employment underground of persons who have not completed 17 years of age.

23. Before any person who has not completed his seventeenth year is employed underground, the manager shall arrange to have him examined by a qualified medical practitioner and, if after examination the medical practitioner is of opinion that such person is fit for employment underground, he shall grant him a certificate in the Form in Schedule E.

24. Every certificate granted by a qualified medical practitioner shall be prepared by filling up the foil and counterfoil on both of which shall be impressed the left thumb mark of the person in whose name the certificate is granted.

25. The qualified medical practitioner shall, when satisfied as to the correctness of the entries made therein, sign the foil and initial the counterfoil, and shall deliver the foil to the manager for safe custody.

26. No certificate granted under rule 23 shall be valid for a period exceeding twelve months. Every person in respect of whom a certificate of fitness has been issued shall be re-examined within twelve months of the last previous examination unless in the meantime he has completed his seventeenth year and the qualified medical practitioner making such re-examination may renew the certificate for a further period not exceeding twelve months or may suspend or revoke the said certificate.

APPENDIX IV—*contd.*

Miscellaneous—*contd*

Statement No. 14—*contd.*

CHAPTER VI A—*contd*

27 A qualified medical practitioner who refuses to grant a certificate referred to in rule 23 or [illegible] refusing to grant [illegible] the manager of the [illegible] case to the Chief [illegible] for decision to a second qualified medical practitioner and such decision shall be final.

28 Every person who has been certified as fit for employment underground shall before he is so employed be provided by the manager with a metal token. Such token shall be stamped with the letter "P" and numbered. The number shall be the same as that of the certificate of fitness.

29 A record of every token so issued and the person to whom it was issued shall be maintained in the office of the mine.

30 In the rule for coal mines—

(a) For the existing Schedule A, the following Schedule shall be substituted—

SCHEDULE A.

(*See* Rule 9)

Register of employees

Name and caste of the employee.	Age.	Sex.	Nature of employment	Date of commencement of employment.	Periods of work.		Intervals for rest to which he/she is entitled.		Days of rest to which he/she is entitled.	Relays* to which he/she belongs.
					Begins	Ends	Begins	Ends.		
					A.M./P.M.	A.M./P.M.	A.M./P.M.	A.M./P.M.		

*In mines where work is carried on by a system of relays

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 14—*contd.*

(*b*) For the existing Schedule C the following Schedule shall be substituted :—

SCHEDULE C.

(*See* RULE 9-B.)

Notice of commencement and end of work.

Name of mine.....

Name of owner of mine.....

It is hereby notified that persons employed in this mine shall begin and end their periods of work between the hours set out below :—

Kind of worker.	1st relay.				2nd relay, if any.				3rd relay, if any.			
	Period of work.		Rest interval.		Period of work.		Rest interval.		Period of work.		Rest interval.	
	Begins.	Ends.	Begins.	Ends.	Begins.	Ends.	Begins.	Ends.	Begins.	Ends.	Begins.	Ends.
	A.M. / P.M.	A.M. / P.M.	A.M. / P.M.	A.M. / P.M.	A.M. / P.M.	A.M. / P.M.	A.M. / P.M.	A.M. / P.M.	A.M. / P.M.	A.M. / P.M.	A.M. / P.M.	A.M. / P.M.

Note.—The words and letters not wanted should be scored out.

In the case of underground workers, the entry in the rest interval column will be *nil*.

(*c*) After Schedule C the following Schedules shall be added :—

SCHEDULE D.

(*See* Rule 11-A.)

Register of minor Accidents.

Date of entry.	Date of accident.	Name of persons injured.	Nature of work.	Nature of injury.	Nature of accident.	Duration of enforced absence from work.	Signature of Manager.
1	2	3	4	5	6	7	8

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 14—*contd.*

SCHEDULE F.

(*See* RULE 9-A.)

Register of persons employed underground.

(Persons entering the mine shall be shown by a X in the column marked "In" against the name.)

(Persons leaving the mine shall be shown by a X in the column marked "Out" against the name.)
(All entries shall be made in ink.)

Period of work commences at p.m. / a.m.

Period of work ends at p.m. / a.m.

For week commencing and ending

Name of person.	Sex.	Nature of work.	Sunday.		Monday.		Tuesday.		Wednesday.		Thursday.		Friday.		Saturday.	
			In.	Out.	In.	Out.	In.	Out.	In.	Out.	In.	Out.	In.	Out.	In.	Out.

Total number of persons underground—

Total number of women underground—

Percentage of persons below ground who are women—

Signature of Register-keeper.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

AMENDMENTS IN [illegible]

4. In Chapter [illegible] shall be substituted [illegible]

9. The [illegible]

5. After Chapter [illegible] shall be added as [illegible]

[illegible]

Certificate of fitness for employment as manager [illegible]

17. Before any person [illegible] the manager shall [illegible] examination the [illegible] ground he shall [illegible]

18. Every [illegible] the following [illegible] name the certificate is [illegible]

19. The [illegible] made therein, and the [illegible] safe custody [illegible]

20. No certificate [illegible] Every person in respect of whom [illegible] twelve months of the last [illegible] teenth year and the qualified [illegible] certificate for a further period [illegible] certificate [illegible]

21. A qualified medical practitioner [illegible] suspends or revokes an existing [illegible] a certificate or for suspending or [illegible] mine disagrees with the opinion of such [illegible] Inspector or Inspector. The Chief Inspector [illegible] second qualified medical practitioner [illegible]

22. Every person who has been [illegible] so employed be provided by the manager [illegible] the letter "P" and numbered. The number [illegible]

23. A record of every token so [illegible] in the office of the mine [illegible]

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 14—*contd.*

6. In the rules for mines other than coal mines—

(*a*) For the existing Schedule A the following shall be substituted :—

SCHEDULE A.

(*See* RULE 9.)

Register of employees.

Name and cast of the employee.	Age.	Sex.	Nature of employment.	Date of commencement of employment.	Periods of work.		Intervals for rest to which he/she is entitled		Date of rest to which he/she is entitled.	Relay* to which he/she belongs.
					Begins.	Ends.	Begins.	Ends.		
					A.M. / P.M.	A.M. / P.M.	A.M. / P.M.	A.M. / P.M.		

*In mines where work is carried on by a system of relays.

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 14—*contd.*

(*b*) For the existing Schedule C the following Schedule shall be substituted —

SCHEDULE C

(*See* RULE 9-A)

Notice of commencement and end of work

Name of mine ....

Name of owner of mine ... .

It is hereby notified that persons employed in this mine shall begin and end their periods of work between the hours set out below —

Kind of worker	1st relay.				2nd relay, if any				3rd relay, if any			
	Period of work.		Rest interval.		Period of work		Rest interval		Period of work		Rest interval	
	Begins	Ends	Begins	Ends	Begins	Ends	Begins	Ends	Begins	Ends	Begins	Ends
	A M / P M.	A.M / P M	A M / P M	A.M / P M	A M / P M	A.M. / P M	A M / P M	A M / P M.	A M / P M	A M / P M	A M / P M	A.M / P M

Note —The words and letters not wanted should be

In the case of underground workers, the entry in th

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 14—*contd.*

(c) After Schedule C the following Schedule shall be inserted :—

SCHEDULE D.

(*See* RULE 17.)

Form of certificate of fitness for employment underground in a mine.

Counterfoil of certificate of fitness.

Serial No.....

Date.....

2. Name.....

3. Father's name.....

4. Sex and caste or religion.....

.....

5. Residence.....

6. Age certified.....

7. Distinctive marks.....

.....

Left thumb impression.

.....

Qualified Medical Practitioner.

Certificate of fitness.

Serial No.....

Date.....

This certificate unless renewed shall not be valid after.....*

I hereby certify that I have personally examined (name).....

.....

son/daughter of.....

(caste, etc.).....

residing at.....

who is desirous of being employed in a mine and that his/her age as nearly as can be ascertained from my examination is.....Years and that he/she is fit for employment underground in a mine as an adult. His/Her descriptive marks are.....

.....

Left thumb impression.

.....

Qualified Medical Practitioner.

Renewed till.....

Date.....

Signature of Qualified Medical Practitioner.

*Date twelve months after date of issue to be filled in by the Medical Practitioner.

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 15.

ACT NO. XXIX OF 1937.

[PASSED BY THE INDIAN LEGISLATURE]

(Received the assent of the Governor General on the 3rd December, 1937.)

An Act further to amend the Indian Mines Act, 1923, for certain purposes.

1923 WHEREAS it is expedient further to amend the Indian Mines Act, 1923, for the purposes hereinafter appearing, It is hereby enacted as follows —

1 *Short title* —(*1*) This Act may be called the Indian Mines (Amendment) Act, 1937

1936 2 *Amendment of Section 2, Act XI of 1936* —In section 2 of the Indian Mines (Amendment) Act, 1936,—

(*a*) in sub section (*1*), for the words "the following sub section shall be deemed to be inserted" the words "the following sub section shall be inserted" shall be substituted, and

(*b*) sub section (*2*) shall be omitted

1923 3 *Amendment of section 9, Act IV of 1923* —In section 9 of the Indian Mines Act, 1923 (hereinafter referred to as the said Act),—

(*a*) to sub section (1) the following words shall be added, namely —

"and shall not be disclosed to any person other than a Magistrate or an official superior or the owner, agent or manager of the mine concerned, unless the Chief Inspector or the Inspector considers disclosure necessary to ensure the safety of any person",

(*b*) in sub section (*2*), for the words "to any one, other than a Magistrate or an officer to whom he is subordinate" the following words shall be substituted, namely —

"contrary to the provisons of sub section (*1*)",

(*c*) in sub section (*3*), for the words following the words "under this section" the following words shall be substituted, namely —

"except with the previous sanction of the Central Government"

4 *Amendment of Section 30 A, Act IV of 1923* —In section 30 A of the said Act, for the word "regulations" the word "rules" shall be substituted, and for clauses (*a*), (*b*), (*c*) and (*d*) the following clauses shall be substituted namely —

"(*a*) requiring the establishment of central rescue stations for groups of specified mines or for all mines in a specified area, and prescribing how and by whom such stations shall be established,

(*b*) providing for the management of central rescue stations and regulating the constitution [illegible] shall

(*c*) prescribing the position, equipment, control, maintenance and functions of central rescue stations,

(*d*) providing for the levy and collection of a duty of excise (at a rate not exceeding six pies per ton) on coke and coal produced in and despatched from mines specified under clause (*a*) in any group or included under clause (*a*) in any specified area the utilisation of the proceeds thereof for the creation of a central rescue station fund for such group or area and the administation of such funds,

(*e*) providing for the formation, training composition, and duties of rescue brigades, and

(*f*) providing generally for the conduct of rescue work in mines"

5 *Amendment of section 31, Act IV of 1923* —In sub section (*1*) of section 31 of the said Act, for the word and figure "and 30" the figures and word "30 and 30A" shall be substituted

O

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 16.

NOTIFICATION.

Dhanbad, the 15th December 1937.

No. P.-2.—In exercise of the powers conferred by Regulation 2(ee) and Regulation 116-A (b) of the Indian Coal Mines Regulations, as published under Notification No. M.-1077, dated the 29th August 1936, and in supersession of Notification No. P.-1, dated Dhanbad, the 29th August 1936, the undernoted list of "Permitted" Explosives is hereby published for general information:—

List of "Permitted" Explosives.

Name of Explosive.	Place of manufacture.	Permissible maximum charge.
Monobel No. 1 . .	Ardeer, Ayrshire, Great Britain, and Modderfontein, South Africa.	28 ounces.
A. 2 Monobel . . .	Ardeer, Ayrshire, Great Britain, and Deerpark, Melbourne, Australia.	28 ounces.
Polar Dynobel No. 2 . .	Ardeer, Ayrshire, Great Britain.	28 ounces
Samsonite No. 3 . .	Ardeer, Ayrshire, Great Britain, and Deerpark, Melbourne, Australia.	28 ounces.
Stonobel . . .	Ardeer, Ayrshire, Great Britain, and Deerpark, Melbourne, Australia.	28 ounces.
Roburite No. 4 . . .	Gathurst, Wigan, Great Britain.	28 ounces.
A. 1 Rounkol	Ardeer, Ayrshire, Great Britain.	18 ounces

APPENDIX IV—*contd*

Miscellaneous—*contd*,

Statement No 16—*contd*

Provided (*a*) that each cartridge of explosive shall be marked with the outline of a crown with the letter "P" in the centre and (*b*) that the explosive when used in any mine or place in which "permitted" explosives are required to be used by any Regulation or order under the Indian Mines Act, shall be fired by one of the following types of approved shot firing apparatus —

List of shot firing apparatus

Manufactured by	Name of apparatus
Magneto Exploders	
British Insulated Cables, Limited, Prescot, Lancashire	Helsby (1932) L T
Ditto	Helsby (1933) L T
John Davis & Son (Derby) Limited, All Saints' Works, Derby	Davis No 15 X (1932) L T
General Electric Co, Ltd, Magnet House, Kingsway, London, W C 2	Magnet (1932) L T
Battery Exploders	
John Davis & Son (Derby) Limited, All Saints' Works, Derby	Davis (1932) L T
General Electric Co, Ltd, Magnet House, Kingsway, London, W. C 2	G E C (1933) L T
Heyes & Co, Ltd, Wigan . . .	Wigan No 4 L T

Statement No. 17.

Circular No. 1.

Dhanbad, the 6th January 1937

From

D Penman, Esq, D Sc, F R S E,
Chief Inspector of Mines in India

To

The Owners, Agent or Manager.

Sir,

I have the honour to invite reference to my Circular No 10 of 1936, dated 28th November 1936, wherein I pointed out the necessity of using certified and totally enclosed flameproof apparatus in safety lamp mines in situations which are not main intake airways and also near depillaring areas

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 16.

NOTIFICATION.

Dhanbad, the 15th December 1937.

No. P.-2.—In exercise of the powers conferred by Regulation 2(ee) and Regulation 116-A (b) of the Indian Coal Mines Regulations, as published under Notification No. M.-1077, dated the 29th August 1936, and in supersession of Notification No. P.-1, dated Dhanbad, the 29th August 1936, the undernoted list of "Permitted" Explosives is hereby published for general information:—

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Stonobel . . .	Ardeer, Ayrshire, Great Britain, and Deerpark, Melbourne, Australia.	28 ounces.
Roburite No. 4 . . .	Gathurst, Wigan, Great Britain.	28 ounces.
A. 1 Rounkol	Ardeer, Ayrshire, Great Britain.	18 ounces

APPENDIX IV—*contd*

Miscellaneous—*contd*,

Statement No 16—*contd*

a crown with
place in which
Indian Mines

List of el ot firing apparatus

Manufactured by	Name of apparatus
Magneto Exploders	
British Insulated Cables Limited Prescot, Lancashire	Helsby (1932) L T
Ditto	Helsby (1933) L T
John Davis & Son (Derby) Limited, All Saints Works, Derby	Davis No 15 X (1932) L 1
General Electric Co, Ltd, Magnet House Kingsway, London, W C 2	Magnet (193?) I T
Battery Exploders	
John Davis & Son (Derby) Limited All Saints Works Derby	Davis (193.) L 1
General Electric Co, Ltd, Magnet House Kingsway, London W C 2	G E C (1933) L T
Heyes & Co, Ltd, Wigan	Wigan No 4 L T

Statement No 17

Circular No 1

Dhanbad, the 6th January 1937

From

D Penman, Esq D Sc, F R S E,
Chief Inspector of Mines in India.

To

The Owners Agent or Manager

Sir

I have the honour to invite reference to my Circular No 10 of 1936 dated 28th November 1936 wherein I pointed out the necessity of using certified and totally enclosed flameproof apparatus in safety lamp mines in situations which are not main intake airways and also near depillaring areas

APPENDIX IV—*contd*

Miscellaneous—*contd*,

Statement No 16—*contd*

a crown with
place in which
Indian Mines

List of shot firing apparatus

Manufactured by	Name of apparatus
Magneto Exploders	
British Insulated Cables, Limited, Prescot Lancashire	Helsby (1932) L T
Ditto	Helsby (1933) L T
John Davis & Son (Derby) Limited, All Saints Works, Derby	Davis No 15 A (1932) L T
General Electric Co, Ltd, Magnet House, Kingsway, London, W C 2	Magnet (1932) L T
Battery Exploders	
John Davis & Son (Derby) Limited, All Saints Works, Derby	Davis (1932) L T
General Electric Co, Ltd, Magnet House, Kingsway, London, W C 2	G E C (1933) L T
Heyes & Co, Ltd, Wigan	Wigan No 4 L T

Statement No. 17.

Circular No. 1.

Dhanbad, the 6th January 1937.

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D Penman, Esq, D Sc, F R S E,
Chief Inspector of Mines in India

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APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 17—*contd.*

As there remains a serious risk of a sudden emission of firedamp in dangerous quantities from goaves in depillaring areas, it is essential for safety that all electrical apparatus which may be situated oven in main intake airways within a distance of 700 feet from the nearest depillaring areas or the nearest goaf edges should also be of the certified and totally enclosed flame proof types, unless the goaves are effectively packed.

All signalling instruments connected to bare signalling wires which may extend to above situations should be of the types approved by the British Mines Department and tested for intrinsic safety.

I shall be glad if you would kindly arrange to give effect to the above matters as early as possible.

I have the honour to be,

Sir,

Your most obedient servant,

D. PENMAN,

Chief Inspector of Mines in India.

Statement No. 18.

Circular No. 2 of 1937.

Dhanbad, the 12th January 1937.

To

The Owner, Agents or Manager.

Apparatus required for sampling and analysing coal-dust samples.

1. Five or six dozen small tins about 4″ tall and 2½″ diameter, with wellfitting lids (empty health-salt tins are quite suitable). The tins must be dried thoroughly in the water-oven, if necessary, before use.
2. One small hand-brush.
3. One tray about 15″ square, with one edge flat, as in the case of an ordinary dust-pan.
4. One case about 16″ by 22″ by 5″ in which to carry the samples.

   It is desirable that the case should be divided into compartments by cardboard partitions as in an egg-box. About three dozen samples can then be taken on one round.

5. One chemical balance in case to weigh 100 grams to one-tenth of a milligram with a box of weights for same.
6. Two desiccators (Schiebler's) 6 inches to 8 inches in diameter.
7. Two pounds of concentrated sulphuric acid (for desiccators and the balance case).
8. Two lamp gauzes for use as sieves.

APPENDIX IV—*contd*

Miscellaneous—*contd*

Statement No. 18—*contd*

9 One sieve of 200 meshes to the lineal inch, with case and top, 3 inches diameter, for sieving test on the stone dust

10 One pair of crucible tongs 8 inches long of iron or copper

11. Four dozen crucibles, best porcelain with lids (1 inch high, 1½ inches diameter)

12 Six watch glasses (3 inches diameter)

Also the following according as heating by gas or electricity is to be resorted to —

13 If heating by gas —

(a) One ordinary water oven 10 inches by 10 inches by 10 inches
(b) One dozen bunsen burners, 6 inches by $\frac{7}{16}$ inch diameter
(c) Four gas taps
(d) One dozen Γ pieces ½ inch diameter
(e) One dozen screw clips, ½ inch with hinge
(f) Ten yards best rubber tubing for gas piping ½ inch diameter
(g) One dozen pipe clay triangles—medium size
(h) Six tripods

14 If heating by electricity —

(a) One electrically heated water-oven (with fittings) inside dimensions 10 inches by 10 inches by 10 inches
(b) One electrically heated furnace (with fittings) capable of attaining a temperature of 1,000°C —inside dimensions 12 inches by 6 inches by 3½ inches

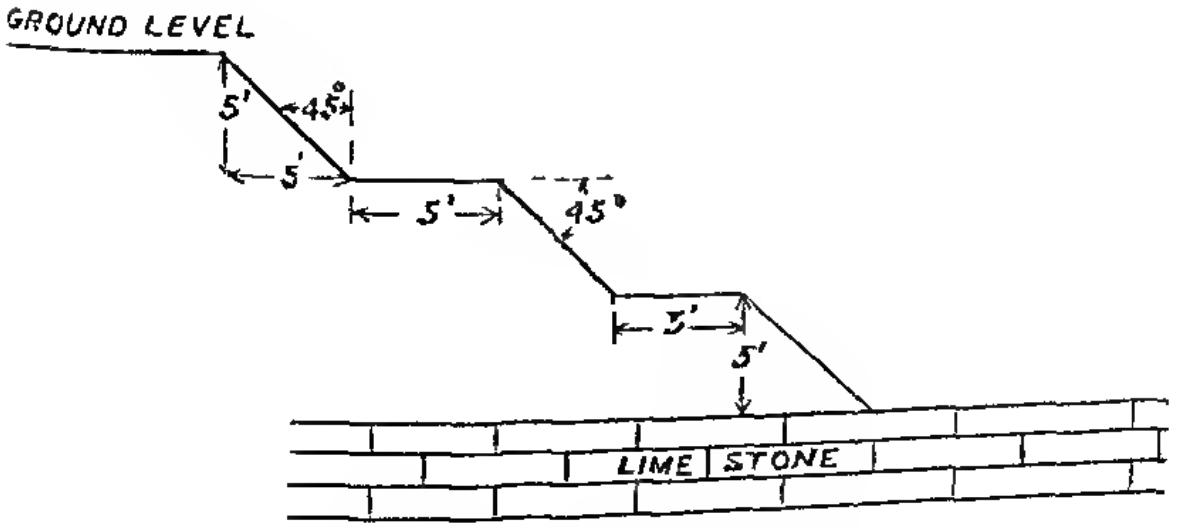
D PENMAN,
Chief Inspector of Mines in India.

Statement No 19

Instructions regarding removal of overburden, sloping and stepping of sides of Limestone quarries

1 All overburden shall be removed down to the top bed of limestone and clear of the edge of the limestone for a distance of not less than 10 feet and constantly maintained at that distance or a greater distance

2 Where the thickness of the overburden exceeds 5 feets the sides shall be stepped as in the sketch below



APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 19—*contd.*

Provided that the steps may be made at intervals of less than 5 feet in the same proportion as is shown in the sketch:

Provided also that foot-paths for the use of work-persons may be made where necessary so long as the sides of such foot-paths are sloped and stepped in the manner specified.

3. No loose pieces of stone should be left lying within 5 feet of the edge of the quarry at the ground level or on any of the steps or benches.

4. Where the limestone is removed in benches no such bench shall exceed 5 feet in height above the level of the quarry in the vicinity of the bench.

5. Where owing to the specially soft nature of the ground precautions exceeding those stated are necessary, they shall be taken by the manager.

D. PENMAN,

Chief Inspector of Mines in India.

Circular No. 3.

Dhanbad, the 17th March 1937.

Copy forwarded to the.....

.....

for information, with the request that the above instructions should be carried out.

Chief Inspector of Mines in India.

Statement No. 20.

Circular No. 4.

Dhanbad, the 21st April 1937.

The attention of owners, Agents and Managers of all mica and copper mines is invited to the register required under Section 28(1) and Rule 9. It is important that a correct record should be maintained at any moment of the names of every person working below-ground in a mine. Such records should be maintained in the sample form of register as appended until such time as an amended form of register is prescribed.

D. PENMAN,

Chief Inspector of Mines in India.

Miscellaneous—*contd*

Statement No. 20—*contd*

Register of work persons employed underground

Name of mine _____

Names of owners _____

Name and caste	Age and sex	Father's name, or in the case of a married woman or widow husband's name	Nature of work	Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Number of hours worked during the week ending ——19
				In.	Out.	In.	Out.	In.	Out.	In.	Out.	In.	Out.	In.	Out.	In.	Out.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Total number of persons employed underground																		

APPENDIX IV—*contd.*

Miscellaneous—*contd.*

Statement No. 21.

Circular No. 5.

Dhanbad, the 1st June 1937.

To

The Owner, Agent or Manager

.....

.....

Sir,
Gentlemen,

ghbhum has drawn my attention to an outbreak of Cholera in the District of ~ ~ in the Dhalbhum Sub-Division. He fears that it may spread rapidly unless preventive steps are taken.

In these circumstances I shall be pleased if you will kindly take all such precautionary measures in consultation and in co-operation with the medical Department of the district as may be necessary.

I have the honour to be,

Sir,

Your most obedient servant,

W. KIRBY,

Chief Inspector of Mines in India (Offg.).

Statement No. 22.

Circular No. 6.

Dhanbad, the 29th June 1937.

The attention of Owners, Agents and Managers of all coal mines is drawn to Notifications No. M-1055, dated the 1st February 1937, and No M-1055, dated the 17th June 1937, issued by the Government of India, Department of Industries and Labour, regarding the regulations for prohibiting the employment of women underground in mines.

It should be noted that the effect of the latter Notification is to suspend only Regulation 1 of the regulations laid down in Notification, dated the 1st February 1937. Regulations 3 and 4 of that notification remain in force unaltered. They read as follows:—

"*Regulation 3.*—No woman shall be permitted to enter or remain in the underground workings of any mine unless she is in possession of a pass granted by the manager of the mine

APPENDIX IV—*contd.*

Miscellaneous—*contd*

Statement No. 22—*contd*

Regulation 4—Before a woman enters a mine with a pass granted under Regulation 3 her name, address and occupation shall be entered in a register maintained for this purpose at the surface of the mine, and her exit from the mine shall also be recorded in that register

Provided that in any mine to which sub section (4) of Section 28 of the Indian Mines Act, 1923 (IV of 1923), has been declared to be applicable the entries required by this regulation may be made in the register prescribed by that sub section

W KIRBY

Chief Inspector of Mines in India (Offg)

Statement No 23

Circular No 7

Dhanbad, the 12th July 1937.

The attention of Owners, Agents and Managers of all coal mines is drawn to the recommendation made by the Coal Mining Committee in paragraph 111 of their Report that all short firers should be paid a regular wage and should not be allowed to have any financial interest in coal getting

It is requested that all will co operate in giving effect to the recommendation as a safety measure

W KIRBY,

Chief Inspector of Mines in India (Offg)

MGIPC—S5—VIII 2-48—24 9 38—1,230